

# **MarxPsi**

**Marxist Dialectics, Materialism,  
Consciousness and Remote Viewing**

**A Sourcebook - Version 1a**

**by Jon Knowles**

## **Dedication**

Dialectics: To Bob Johnson and Mike Conan, dear friends and comrades, who passed away far too soon.

Remote Viewing: To Daz Smith, Debra Katz and Tunde Atunrase - “goal-oriented individuals at the grassroots level” - the people Ingo Swann said were the future of remote viewing.

## Content and Sources

For the most part, the chapters and appendixes consist of selections from revolutionaries, philosophers, historians and others -- which is what makes this a Sourcebook.

I feel it is more valuable to offer the exact words of these doers, thinkers and writers than to present summaries with comments. Instead I provide the exact words, with a few comments here and there, and occasional passages by myself. The extracts at times reference each other -- there is interweaving as well as repetition, both of which can be useful in grasping complex material. In addition numerous additional sources are noted, many with Internet links.

The **Table of Contents** lists the many authors cited, rather than the topics covered in each chapter and appendix.

I've included information from Wikipedia and a few dialogs with Google's AI program Gemini (formerly Bard) and Wondershare's Lumi, both for the novelty and for the (usually) accurate content. However, no AI program is totally reliable (they "hallucinate") and Wikipedia has a known bias against anything about remote viewing, psi or parapsychology. So I have checked the comments made by these AI programs for accuracy.

The older I become, the more I come across books which should instead have been articles. There is a mania for prose-stuffing in nonfiction. This Sourcebook is not short, but I try to limit my comments and purged extraneous verbiage. Also, I have tried to write informally and above all, clearly. The goal is to be understood, right?

**Disclaimer:** This Sourcebook is being distributed free in pdf format with no financial benefit to the compiler/author. However, if copyright owners wish any extract in the Sourcebook removed, it will be deleted, unless there is a difference of opinion about "fair use".

Email: jonknowles8 (at) yahoo (dot) com.

**Use:** Most of the extracts in the Sourcebook are in the public domain. Permission is given to use copyrighted material of Jon Knowles, but not commercially unless it is used with attribution as part of a course, class, book, video, etc.

## Formatting guidelines

This is NOT an academically-oriented book. Because of the nature of the Sourcebook, I use nonstandard formatting. For example, there are many long extracts and these are not enclosed in quotation marks. The reason is that the huge number of quotation marks would clutter the text. The quotes are of course attributed.

For clarity about who is being quoted, I've often added the name of the author just above the text quoted. "JK" indicates my comments and remarks.

Titles of books and articles are *in italics*. Names of journals are not formatted. **Names** are often in bold.

Hyphens and dashes: Em-dashes in quoted texts are retained. Dashes that I have entered consist of two hyphens -- because that is more pleasing to the eye (in my opinion) than em-dashes. I use a single hyphen in place of an en-dash at times and for the same reason.

Authors and other persons mentioned are often listed by Last name, First name (**Einstein, Albert**).

The different spellings in English and American texts (color/colour) are retained.

The text is full justified. Many headings are on the left margin; some are centered.

Many of the texts used are in pdf format online. Accordingly, page numbers most often refer to pages in a pdf.

# Table of Contents

- 7 Introduction**
- 10 Precognitive Reviews**
- 12 Reflections**

## Part One

### **14 Preliminary: A Note on Logic**

### **18 Chapter 1: What is Dialectics?**

Aristotle, Leon Trotsky, Friedrich Engels, Vladimir Lenin, Mao Zedong

Other primary sources: G.W.F. Hegel, Vladimir Lenin, Karl Kautsky, Jose Maria Sison, Ramesh Chandra Majumdar, Nagalingam Sanmugathan, T.A. Jackson

Others: Kevin Andersen, Andy Blunden, Robin Clapp, N. DeGenova, Fredric Jameson, Nick Knight, George Moore, Ronald H. McKinney, Lawrence Wilde

### **33 Chapter 2: Approaches to Dialectics in Marxist Revolutions**

Amilcar Cabral, Samora Machel, José Carlos Mariátegui, Mao Zedong, Chinese Workers and Peasants

Others: Bernard Magubane, Marc Becker, Yao Wen-Yuan, China Daily, Elaine Hui and Eli Friedman, Shao Tien-Chen

### **56 Chapter 3: Criticisms and Perspectives on Dialectics**

Ernst Mayr, Karl Popper, Jean-Paul Sartre, Louis Althusser, Rosa Lichtenstein

Others: Berry Groisman, Bernard Harcourt, Rurik Davidson, Theodor Adorno, Joseph Pratt and Yingnan Zhao, Cadell Last, Nathan Coombs

### **88 Chapter 4: Dialectical Materialism and Science**

Karl Schorlemmer, Karl Marx, Friedrich Engels, Leon Trotsky, J.D. Bernal, J.B.S. Haldane, Richard Levins and Richard Lewontin

Others: Ian Angus, Robert L. Carneiro, Richard Clarke, Ben Campbell, Helena Sheehan, Victor Wallis, Alan Woods and Ted Grant

### **120 Chapter 5: Marxists on Materialism and Idealism**

Engels, Marx, Georgi Plekhanov, Lenin, Nikolai Bukharin and Mao

### **137 *Perspective***

### **139 Chapter 6: Dialectical Materialism and Quantum Mechanics**

Pascual Jordan, Niels Bohr, Albert Einstein, Max Born, Léon Rosenfeld, David Bohm, Shoichi Sakata, Mitsuo Taketani

Others: Olival Freire and Christoph Lehner, Anja Skaar Jacobsen, Christian Forstner, William Seager, K.V. Laurikainen, David Joravsky, Harry Nielsen, Paul Mattick, Ben Gliniecki, Suzanne Gieser, Bert Schroer

**173 Chapter 7: Materialism, Idealism and Consciousness**

David Chalmers, John Searle, Alfred North Whitehead, David Bohm

Others: Andy Clark, Shaun Gallagher, David Ray Griffin, Rupert Sheldrake, Fraser Watts, Bertrand Russell, Alexander Spirkin, Santi Tafarella, John Eccles, Donald Watson and Bernard Wilson

**Part Two**

**194 Chapter 8: What is Remote Viewing?**

Ingo Swann, Harold Puthoff, Russell Targ

Others: Elisabeth Rauscher, Marty Rosenblatt, Edwin May and Sonali Bhatt Marwaha, Debra Lynne Katz and Patrizio Tressoldi, Paul H. Smith

**207 Chapter 9: The Practice of Psi in Russia**

Lenin, Leonid Vasiliev, Bernard Kazhinsky, Nina Kulagina, Karl Nikolayev and Yuri Kamensky, George Knapp, Jacques Vallée, Edwin May, Larissa Vilenskaya, Joe McMoneagle, Angela Ford, Vinogradava, General Nikolai Sham, General Alexei Savin

Others: Martin Ebon, J.G. Pratt, Alexander Spirkin, Victor Marchetti, Wolfgang Spickermann, Ingo Swann, Peter Dunov, Scott Hill, Veneta Ivanova, Nikolai Khokhlov, Magdo Zsuzsanna, Victor Rubel, Loyd Auerbach, Bernice Rosenthal, Georg Schaefer, Lyudmila Zhivkova, Andrei Znamenski

**222 Chapter 10: Remote Viewing's Challenge to Materialism**

Daz Smith, Debra Lynne Katz, Ingo Swann

**237 Chapter 11: Wrapping Up and Looking into Pandora's Box**

**257 Appendix 1: The Easy Way into Dialectics - For Kids, etc.**

**262 Appendix 2: Applications of the Principal Contradiction Worldwide**

**264 Appendix 3: Dialectics in the New Communist Movement**

**282 Appendix 4: The National Joint Study**

**291 Appendix 5: Chomsky on Post-Modern Philosophers**

**298 Appendix 6: Crust, Or the Very Uplifting Sublation of the New Materialism**

**302 Appendix 7: The UFO-Remote Viewing Connection**

**313 Appendix 8: Parapsychology around the World**

**318 Appendix 9: Richard Feynman and Quantum Physics**

**326 Appendix 10: About the Author/Compiler**

**332 Bibliography**

**353 Subject Index**

**386 Name Index**

## **Introduction**

Who is the Sourcebook for? I compiled/wrote it for several kinds of readers.

First, it is for those interested in the methods used in several great revolutions in the 20<sup>th</sup> Century -- e.g. Russia and China. Revolutionaries in both countries employed Marxist dialectics in devising strategies and tactics. There should be something to learn from these great revolutions -- ideas that can be applied toward making major social change today. Certainly fundamental change is what the world cries out for.

Second, the book is for those who want to learn a bit about remote viewing, which can be described as a psychic craft. RV was used by the U.S. government between 1975 and 1995 at a cost of about \$21 million. Remote viewing has been in the public domain since 1995, but most of the public has never heard of it.

What is remote viewing? Socialist Upton Sinclair called it “mental radio” and Albert Einstein wrote a preface to Sinclair’s book emphasizing that it was well worth looking into.

Why combine dialectics and remote viewing in the same book?

In hopes that it will pique the curiosity of people familiar with one area but not the other. Leftism and remote viewing. Marxist Dialectics and psi. There is a link -- consciousness, which has been an enduring puzzle for those of us with a materialistic bent and, it must be admitted, for those who are steeped in remote viewing or parapsychological research.

As noted earlier, the Sourcebook provides extensive extracts from texts as well as links for study and reflection. I include my comments and views in many places, without claiming to have special insight or wisdom. The wisdom comes from those who pioneered the way (Marx and Engels), and those who put it into practice on a grand scale (particularly Lenin and Mao), as well as from many others who are cited in the book. I especially value the views of those who speak from practical experience and not simply from teaching, writing and lecturing. The Sourcebook draws on the work and views of luminaries in the sciences, philosophy, and remote viewing as well as from revolutionaries.

### **How I came to write the Sourcebook**

Starting in the late 1960’s, a worldwide movement inspired by the existence of a powerful socialist camp came into existence. One segment of this surge, the “New Communist Movement” (NCM), had its heyday in the 1970s and 1980s. As we are painfully aware in the third decade of the 21<sup>st</sup> Century, these efforts were not successful in the United States, nor in any other advanced industrial nation. The movement was defeated and in 2024 only a few groups from that era remain.

I participated in the movement for about 20 years -- took part in study groups and joined with others in forming small groups which attempted to put Marxism into practice. We wanted to build a revolutionary party and finding our bearings through study was essential. We took jobs in industry

or offices and shops, and did support work for revolutionary struggles such as in Central America and Eritrea.

My parents had been members of the Communist Party (USA) but had never told me anything about Marxism, so I came to the subject relatively fresh. I majored in philosophy in college but only one course in Marxism was offered. So the study groups of the New Communist Movement were my real introduction to Marxist thinking and practice.

Twenty years later, after withdrawing from the failing Marxist movement in the early 1990s, I spent another twenty years in a quite different field -- remote viewing. I learned that it is amazing but true that you can acquire information from a distant location by psychic means. The information can be from the past or from the future, which places remote viewing outside the standard materialist paradigm. Part Two of this book provides a brief introduction to remote viewing, including the government-sponsored programs in the United States and in the Soviet Union. Yes, the Soviet materialists developed psychic capabilities - even deployed them in combat zones.

Following the Russian revolution in 1917 and starting with V.I. Lenin, the worldwide Marxist movement began to combine the terms dialectics and materialism - Dialectical Materialism was born. Millions of people have studied, pondered, and tried to put this philosophy into practice. Cuba, Vietnam and China still claim to uphold this perspective -- although the socialist camp ran its course decades ago and Marxism-Leninism has a much-reduced presence in the world. The Communist Party of China claims to be using Marxism-Leninism to build "Socialism with Chinese Characteristics." That's 17.5% of the world's population of 8.0 billion so Marxism-Leninism is by no means extinct. However many, including myself, believe that China has largely abandoned a path that will lead to building socialism rather than capitalism. (As is now well known, there are many billionaires in "Communist China" -- really?? This is socialism?)

Out of the New Communist Movement of the 1970's and 1980's came only a few books about its history, the most prominent among them being Max Elbaum's well-researched *Revolution in the Air*. The present Sourcebook does not seek to add a chapter to that history. It has different purposes, such as exploration of Marxist philosophy and practices -- rather than a political-economic history.

To recap and add a few details, I was involved in the Marxist-Leninist movement for 20 years and then in the remote viewing community for another 20 years. I was a "pink diaper baby" - I say pink rather than red because my parents did not introduce Marxism to me as I grew up. My great respect for my parents predisposed me toward the Left, but it wasn't till after graduating from college that I turned to the Left and became politically active. I came to Marxism in the US in the late 1960s and early 1970s, from the worldwide upheaval over the Vietnam War and global movements seeking an end to exploitation, colonial and Superpower domination and to make a much better world. Things were topsy-turvy in the capitalist world and a socialist camp beckoned.

In the 1960's I took part in anti-war demonstrations and in 1971 after two years teaching English in Hong Kong, I returned to the US and helped start a GI support project outside Travis Air Force Base in Northern California. Marxist study groups were forming in the Bay Area and I took part in a few and then in the party-building activity of tiny groups like the Organization for



Revolutionary Unity and Freedom Road Socialist Organization (which still exists under the name Liberation Road). Around 1990 I decided to withdraw from the organization since the movement had collapsed and the organization did not seem to have prospects for growth and success. I then discovered remote viewing, which has been my focus to the present day. After writing two books on remote viewing and publishing my father's autobiography, I decided to write this Sourcebook. After having led a very long life, it's time to sum up while I still can!

### **What this book is not about**

The Sourcebook is not a primer on the topics covered. There are hundreds of introductions to dialectics, dialectical materialism, Marxism and consciousness. Nor is it a thoroughgoing treatment of dialectics, materialism or remote viewing.

According to Gemini:

WorldCat: This vast library catalog lists over 800,000 records for various combinations of "Marx" and "Marxism" in different languages. However, this represents only a fraction of the actual number, as it doesn't include many smaller libraries or unpublished works.

The number of books on Marx and Marxism in all languages likely falls somewhere between hundreds of thousands and millions. The true figure remains unknown, but the vastness of the subject is undeniable.

There are endless articles, books, journals, videos and podcasts by Marxists -- not to mention non-Marxist accounts about the above topics. I prefer to rely on people in both fields who know where the rubber hits the road. Not on those who author manuals about how to drive.

The Sourcebook is not an academic treatment of philosophical subjects. I am by no means a professional philosopher. There is a lot of hi-falutin philosophy in academia, and I touch on only a bit of it. Which is in line with Noam Chomsky's devastating takedown of such offerings (in Appendix 5).

A Sourcebook about remote viewing would not be complete without --

## Precognitive Reviews

\* Werner B. Grimm, August 1, 2024

Uneven as an earthquake. Author doesn't know you can't write a book like this! It's not even a real book, for chrissake - it's a pdf. And free! Weirdly mixes Marxism, Communism, idealism, materialism, quantum physics, "remote viewing" and even UFOs! Everything but the kitchen sink. It's *sub rosa* but not a Samizdat – it's a whadizdat?

\*\*\*\* Stanley J. Dardo, September 13, 2024

This is a quirky effort. It combines remote viewing, dialectics, and materialism. I had never heard of remote viewing before. The book is an extended look at dialectics and materialism, and Knowles introduces remote viewing in the final chapters. It is an unusual book, combining numerous quotes about dialectics and materialism with the author's observations and a few of his writings. As the author stresses, it is as much a sourcebook as anything.

Knowles focuses on the Marxist interpretation of dialectics and in particular the tradition started by Lenin and the version Mao utilized which led to successful revolutions. The author also touches on later applications of dialectics. This is serious stuff and suitable for someone who really wants to dig into dialectics. The materialist section of the book deals with the ancient materialism-idealism controversy, including implications from quantum mechanics. The concluding chapters examine what the reality of remote viewing means for a materialist view of reality.

The author defines remote viewing as a "psychic craft." Combining a psychic craft with Marxist materialism is mind-blowing but actually it's a quite sober book. A lot to ponder and absorb. I found it worth the effort.

\*\* Ima Smort, October 16, 2024

Author fails to understand that philosophy is a stand-alone discipline that does not require practical confirmation of its premises and rational conclusions. That is, of its CORRECT IDEAS. He criticizes Searle's *Rediscovery of the Mind*, and opposes the philosophical tradition of the last 50 years that Searle says is a waste of time because it relies on arguments rather than on practice. Almost a waste of pixels – but slightly useful for the source material.

\*\* Hartley Trot, November 22, 2024

An unusual, very meaty presentation of the classics of dialectics. Kudos to the author for acknowledging the chops of the best of them all, Leon Trotsky, with his deep understanding of dialectics - starting with the failure of the so-called principle of Non-Contradiction. A is not A, folks. Never was!

\* A reader. December 5, 2024

Boring. Who gives a flying F about this failed Marxist gibberish?? And it's mislabeled: The book is basically an extended sampling of texts and an alleged reference guide, and no more than that. Plus the author claims he is still a materialist, but shows no solidarity at all with his buddies the New Materialists. See the lame parody called Crust.

\*\*\* Professor Winthrop Eliot Dunster, III, December 30, 2024

The Marxist and New Age equivalent of *Tristram Shandy*. In other words, unorthodox, eclectic and amusing in places. The author lacks a Ph.D. yet presumes to think he is qualified to assemble this motley concoction. He is inconsistent in his “thinking” and in use of the hyphen. A sign of these dissolute times.

\*\* A Controlled Viewer, July 14, 2025

Disappointed. Was looking forward to this third book by Knowles. I found his first, *Remote Viewing from the Ground Up*, informative and even entertaining in parts, although it was not about Controlled Remote Viewing, which is of course the heart and soul of RV. The book devotes too much space to something hardly anyone cares about – dialectics! There is VERY LITTLE on remote viewing. Viewers should skip to the final chapters for something relevant, if they read this whatchamacallit at all - or just get the substantial book he coauthored on Associative Remote Viewing.

**Precognitive comment by the Author written on July 20, 2004:**

Why twenty years from now will I put together a quirky sourcebook on two such disparate topics as dialectics/revolution and remote viewing/consciousness?? First, because it has been and will be my path, and one should write about what knows, or will know.

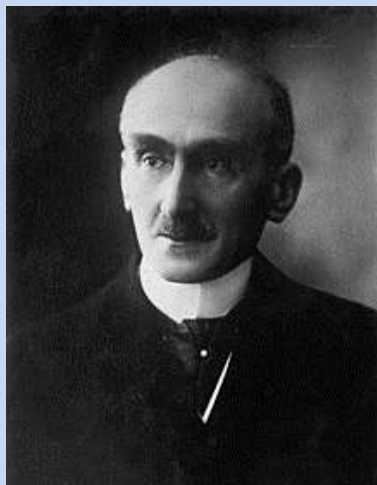
Second in the hope that people wanting to make fundamental social change may broaden their perspective to take a look at remote viewing and the significant implications of these very odd but very real phenomena. And vice versa, in the hope that remote viewers will be open to learning about dialectics and its use in making revolution -- or at least major social change. Perhaps the Sourcebook will open a window in what is now a wall.

## Reflections

We say “universe” and the word makes us think of a possible unification of things. One can be a spiritualist, a materialist, a pantheist, just as one can be indifferent to philosophy and satisfied with common sense: the fact remains that one always conceives of one or several simple principles by which the whole of material and moral things might be explained. This is because our intelligence loves simplicity. It seeks to reduce effort, and insists that nature was arranged in such a way as to demand of us, in order to be thought, the least possible labor. It therefore provides itself with the exact minimum of elements and principles with which to recompose the indefinite series of objects and events. But if instead of reconstructing things ideally for the greater satisfaction of our reason we confine ourselves purely and simply to what is given us by experience, we should think and express ourselves in quite another way. While our intelligence with its habits of economy imagines effects as strictly proportioned to their causes, nature, in its extravagance, puts into the cause much more than is required to produce the effect. While our motto is Exactly what is necessary, nature’s motto is More than is necessary,—too much of this, too much of that, too much of everything.

Reality, as [William] James sees it, is redundant and superabundant. Between this reality and the one constructed by the philosophers, I believe he would have established the same relation as between the life we live every day and the life which actors portray in the evening on the stage. On the stage, each actor says and does only what has to be said and done; the scenes are clear-cut; the play has a beginning, a middle and an end; and everything is worked out as economically as possible with a view to an ending which will be happy or tragic. But in life, a multitude of useless things are said, many superfluous gestures made, there are no sharply-drawn situations; nothing happens as simply or as completely or as nicely as we should like; the scenes overlap; things neither begin nor end; there is no perfectly satisfying ending, nor absolutely decisive gesture, none of those telling words which give us pause: all the effects are spoiled. Such is human life.

— Henri Bergson, *The Creative Mind: An Introduction to Metaphysics*





“It is right to rebel” - Mao Zedong



## Preliminary: A Note on Logic

This Sourcebook is guided throughout by a fundamental principle which Karl Marx put this way:

The question whether objective truth can be attributed to human thinking is not a question of theory but is a practical question. Man must prove the truth — i.e. the reality and power, the this-sidedness of his thinking in practice. The dispute over the reality or non-reality of thinking that is isolated from practice is a purely scholastic question. - Karl Marx, *Theses on Feuerbach*

Most philosophy as practiced in academia is divorced from practice, including revolutionary practice. Some philosophy, including the philosophy of logic, does have practical uses even today when philosophy has been dethroned as Queen of the Sciences. For example, modal logic is used by search engines to rank entries by relevance. And Fuzzy Logic was employed by Dr. Edwin May in developing a successful Associative Remote Viewing system. In Dr. May's set up, a coder assigns a truth value from 0 to 1.0 (the degree of correspondence), based on the extent to which words and sketches in a remote viewing session match categories assigned to a photograph. That is, it is a numerical estimate of the "degree of truth," not simply whether something is true or not.

To convey the abundance of theories about logic, here is a partial list of types of logic from the *Stanford Encyclopedia of Philosophy*.

<https://plato.stanford.edu/entries>

Hybrid, Fuzzy, Connexive, Dependence, Relevance, Provability, Free, Justification, Linear, Modal, Intuitionist, Paraconsistent, Informal, Deontic, Epistemic, Discussive/Discursive, Temporal, Ancient, Classical, Dialetheism, Dialogical, Propositional, Combinatory, Intentional, Inductive, Infinitary, Algebraic Propositional, Many-Sorted, Independence Friendly, Many-Valued, Super- and Subvaluationism, Truth-Value Gluts and Gaps, Non-Monotonic, Quantum, First-Order & Second-Order

There is a thriving practice of writing and publishing about the many forms of logic reflecting the fact that there is no single concept of truth that governs our understanding of logic. There are bi-valued, tri-valued and four-valued forms of logic. No single form or type holds sway. Dialecticians might say, "Of course not -- it's a field in flux!"

Further, an important controversy among Marxists, whether academic or revolutionaries, is the relationship between dialectical logic and classical formal logic. We will explore the logic of dialectics in several chapters.

To take what is probably the most important example of traditional formal logic, a foundational notion since Aristotle has been the "Law of the Excluded Middle" (LEM), which can be stated in various ways:

Wikipedia:

In logic, the law of excluded middle (or the principle of excluded middle) states that for every proposition, either this proposition or its negation is true.

**Stanford University**, *An Introduction to Philosophy*

<https://web.stanford.edu/~bobonich/glances%20ahead/IV.excluded.middle.html>

The law of excluded middle can be expressed by the propositional formula  $p \vee \neg p$ . It means that a statement is either true or false. Think of it as claiming that there is no middle ground between being true and being false. Every statement has to be one or the other. That's why it's called the law of excluded middle, because it excludes a middle ground between truth and falsity.

JK: Note that these are two different formulations of the law: a) a proposition or its negation is true; b) a proposition is true or false.

From the *Stanford Encyclopedia of Philosophy: Contradiction*:

The twin foundations of Aristotle's logic are the law of non-contradiction (LNC) (also known as the law of contradiction, LC) and the law of excluded middle (LEM). In *Metaphysics Book Γ*, LNC—"the most certain of all principles"—is defined as follows:

It is impossible that the same thing can at the same time both belong and not belong to the same object and in the same respect, and all other specifications that might be made, let them be added to meet local objections (1005b19–23).

It will be noted that this statement of the LNC is an explicitly modal claim about the incompatibility of opposed properties applying to the same object (with the appropriate provisos). Since Łukasiewicz (1910), this ontological version of the principle has been recognized as distinct from, and for Aristotle arguably prior to, the logical formulation ("The opinion that opposite assertions are not simultaneously true is the firmest of all"—Met. 1011b13–14) and the psychological formulation ("It is impossible for anyone to believe that the same thing is and is not, as some consider Heraclitus said"—Met. 1005b23–25)"

[End Stanford entry]

JK: Here we have a claim about three realms of logic or three types of logical statement: **ontological** (what exists in the world), **logical** (the truth-value of statements) and **psychological** (often called **epistemic** - related to our knowledge of what exists in the world).

The revolutionaries and progressives quoted throughout this Sourcebook were not academic philosophers and they lived before many of the types of logic mentioned above were invented and discussed. Their statements in terms of philosophy are not "professional," as Lenin acknowledged in letters about his limitations:

...The third subject is philosophy. I am fully aware of my unpreparedness in this sphere, which prevents me from speaking about it in public. But, as a rank-and-file Marxist, I read attentively our Party philosophers...

*Letter to Gorky, 7 February 1908*

To be sure, we ordinary Marxists are not well up in philosophy, but why insult us by serving this stuff up to us as the philosophy of Marxism! I would rather let myself be drawn and quartered than consent to collaborate in an organ or body that preaches such things. *Letter to Gorky, 25 November 1908*

As noted earlier, I include reflections by “professional philosophers”. Although not revolutionaries, they provide their well-informed versions of history and at times offer keen insights. You might analogize that they like are the 860 billion glial cells in the brain supporting the 86 billion neurons which get the job done. (Or so it is thought!) Both have a role.

History, as written by both revolutionaries and academics, demonstrates that dialectical logic has played an important role in making revolution. As mentioned earlier, there are likely important lessons we can draw from the past practices of revolutionaries that can apply to making fundamental social change today. As we shall see too though, revolutionaries at times went overboard in their claims about dialectics -- for example, extending them to the entire universe.



## **PART ONE**

### **Dialectics and Dialectical Materialism**

## Chapter 1: What is Dialectics?

I never heard about dialectics in my childhood, even though my parents were members of the Communist Party and for two years I lived with another family in a house where CP members often visited. I first took real note of Marxism in college when I took the one course offered on the subject. But at the time Marxism didn't fully take with me, though it made more sense than the analytic philosophy that dominated the department. Nor did it take during the tumultuous 60's. I finally got the news while living in Hong Kong when I read Mao Zedong's *Selected Works*. Living close to socialist China had a lot to do with it as well.

Let's start with the explanation given by the *Encyclopedia Britannica*:

<https://www.britannica.com/topic/dialectic-logic>

Among the classical Greek thinkers, the meanings of dialectic ranged from a technique of refutation in [debate](#), through a method for systematic evaluation of definitions, to the investigation and classification of the relationships between specific and general concepts. From the time of the [Stoic](#) philosophers until the end of the European Middle Ages, dialectic was more or less closely identified with the [discipline](#) of [formal logic](#).

More recently, [Immanuel Kant](#) denoted by "transcendental dialectic" the endeavour of exposing the [illusion](#) involved in attempting to use the categories and principles of the understanding beyond the bounds of phenomena and possible experience. G.W.F. Hegel identified dialectic as the tendency of a notion to pass over into its own negation as the result of conflict between its [inherent](#) contradictory aspects. [Karl Marx](#) and [Friedrich Engels](#) adopted Hegel's definition and applied it to social and economic processes.

JK: I am most interested in the meaning which Marx, Engels and later Marxists gave dialectics and have not included passages from Kant or Hegel.

Let's revisit one pillar of traditional dialectics, the so-called the Law (or principle) of Identity, of non-contradiction.

**Aristotle** put it this way:

It is impossible that the same thing can at the same time both belong and not belong to the same object and in the same respect, and all other specifications that might be made, let them be added to meet local objections (**Aristotle**, *Metaphysics*, Book IV, part 3)

<http://classics.mit.edu/Aristotle/metaphysics.4.iv.html>

The law can be represented as  $A = A$ . As obvious as this seems, it was contested by Hegel and by Marxists as well. Here is Leon Trotsky on the issue:

**Leon Trotsky**, *A Petty Bourgeois Opposition in the Socialist Workers Party*

<https://www.marxists.org/archive/trotsky/edom/dm/09-pbopp.htm>

Trotsky:

I will here attempt to sketch the substance of the problem in a very concrete form. The Aristotelian logic of the simple [syllogism](#) starts from the proposition that ‘A’ is equal to ‘A’. This postulate is accepted as an axiom for a multitude of practical human actions and elementary generalisations. But in reality ‘A’ is not equal to ‘A’. This is easy to prove if we observe these two letters under a lens—they are quite different from each other. But, one can object, the question is not of the size or the form of the letters, since they are only symbols for equal quantities, for instance, a pound of sugar. The objection is beside the point; in reality a pound of sugar is never equal to a pound of sugar—a more delicate scale always discloses a difference. Again one can object: but a pound of sugar is equal to itself. Neither is this true—all bodies change uninterruptedly in size, weight, colour, etc. They are [never equal to themselves](#). A sophist will respond that a pound of sugar is equal to itself ‘at any given moment.’

JK: Not only Trotsky, but Marx, Engels, Lenin and Mao held the same opinion. There will be more on this later in the book, but let’s now revisit another “law” of dialectics -- Aristotle’s law of the excluded middle (LEM).

**Aristotle:**

But on the other hand there cannot be an intermediate between contradictories, but of one subject we must either affirm or deny any one predicate. (**Aristotle**, *Metaphysics, Book IV, part 7* <http://classics.mit.edu/Aristotle/metaphysics.mb.txt>)

JK: That is to say, the law of non-contradiction states that contradictory propositions cannot both be true in the same sense at the same time. For example “Zeus is mortal” and “Zeus is not mortal” cannot both be true.

As mentioned earlier in the note on logic, this “law” too was rejected by Hegel, and following him, by Marx, Engels and many Marxists, not only with regard to propositions (statements), but also about what happens in world -- although the LEM *seems to be* self-evident.

These “laws” and Aristotle’s teachings generally were extremely influential for over 2000 years.

Turning to Marx’s partner and long-time collaborator, **Friedrich Engels** proposed three laws of dialectics in his *Dialectics of Nature*:

<https://www.marxists.org/archive/marx/works/1883/don/ch02.htm>

It is, therefore, from the history of nature and human society that the laws of dialectics are abstracted. For they are nothing but the most general laws of these two aspects of historical development, as well as of thought itself. And indeed they can be reduced in the main to three:

The law of the transformation of quantity into quality and *vice versa*;

The law of the interpenetration of opposites;

The law of the negation of the negation.

JK: Note that Engels says “in the main”, implying there are other “laws” of dialectics.

Engels continues:

All three are developed by Hegel in his idealist fashion as mere laws of *thought*: the first, in the first part of his *Logic*, in the *Doctrine of Being*; the second fills the whole of the second and by far the most important part of his *Logic*, the *Doctrine of Essence*; finally the third figures as the fundamental law for the construction of the whole system. The mistake lies in the fact that these laws are foisted on nature and history as laws of thought, and not deduced from them. This is the source of the whole forced and often outrageous treatment; the universe, willy-nilly, is made out to be arranged in accordance with a system of thought which itself is only the product of a definite stage of evolution of human thought. If we turn the thing round, then everything becomes simple, and the dialectical laws that look so extremely mysterious in idealist philosophy at once become simple and clear as noonday.

JK: Engels' views have been the fountainhead of the Marxist approach to the subject, and many volumes have been devoted to defining and refining the Marxist approach to dialectics. Marx never did write a piece summing up his views on the subject, though, and some claim Engels was faithfully representing Marx's approach, while others say he significantly misrepresented it.

**[Engels' first law: quantitative changes result in qualitative changes]**

1. The law of the transformation of quantity into quality and *vice versa*. For our purpose, we could express this by saying that in nature, in a manner exactly fixed for each individual case, qualitative changes can only occur by the quantitative addition or subtraction of matter or motion (so-called energy).

All qualitative differences in nature rest on differences of chemical composition or on different quantities or forms of motion (energy) or, as is almost always the case, on both. Hence it is impossible to alter the quality of a body without a definition or subtraction of matter or motion, i.e. without quantitative alteration of the body concerned. In this form, therefore, Hegel's mysterious principle appears not only quite rational but even rather obvious.

It is surely hardly necessary to point out that the various allotropic and aggregational states of bodies, because they depend on various groupings of the molecules, depend on greater or lesser quantities of motion communicated to the bodies.

...Finally, the Hegelian law is valid not only for compound substances but also for the chemical elements themselves. We now know that "the chemical properties of the elements are a periodic function of their atomic weights" (Roscoe-Schorlemmer, *Complete Text-Book of Chemistry, II*, p. 823), and that, therefore, their quality is determined by the quantity of their atomic weight. And the test of this has been brilliantly carried out. Mendeleev proved that various gaps occur in the series of related elements arranged according to atomic weights indicating that here new elements remain to be discovered. He described in advance the general chemical properties of one of these unknown elements, which he termed eka-aluminium, because it follows after aluminium in the series beginning with the latter, and he predicted its approximate specific and atomic weight as well as its atomic volume. A few years later, Lecoq de Boisbaudran actually discovered this element, and Mendeleev's predictions fitted with only very slight discrepancies. Eka-aluminium was realised in gallium (*ibid.*, p. 828). By means of the -- unconscious -- application of Hegel's law of the transformation of quantity into quality, Mendeleev achieved a scientific feat which it

is not too bold to put on a par with that of Leverrier in calculating the orbit of the still unknown planet Neptune.

In biology, as in the history of human society, the same law holds good at every step, but we prefer to dwell here on examples from the exact sciences, since here the quantities are accurately measurable and traceable.

[End Engels]

### **Lenin (Vladimir Ilyich Ulyanov)**

[https://en.wikipedia.org/wiki/Vladimir\\_Lenin](https://en.wikipedia.org/wiki/Vladimir_Lenin)

JK: The principal leader of the Bolshevik Party, Lenin was not a philosopher but he studied Hegel in depth, the philosopher from whom Marx and Engels claimed to have derived their approach to dialectics. In Lenin's *Notebooks* we find:

The splitting of a single whole and the cognition of its contradictory parts (see the quotation from Philo on [Heraclitus](#) at the beginning of Section III, "On Cognition," in [Lasalle's](#) book on Heraclitus) is the *essence* (one of the "essentials," one of the principal, if not the principal, characteristics or features) of dialectics. That is precisely how [Hegel](#), too, puts the matter ([Aristotle](#) in his *Metaphysics* continually *grapplies* with it and *combats* Heraclitus and Heraclitean ideas).

The correctness of this aspect of the content of [dialectics](#) must be tested by the history of science. This aspect of dialectics (e.g. in [Plekhanov](#)) usually receives inadequate attention: the identity of opposites is taken as the sum-total of *examples* ["for example, a seed," "for example, primitive communism." The same is true of [Engels](#). But it is "in the interests of popularisation..."] and not as a *law of cognition* (and as a law of the objective world).

In mathematics: + and —. Differential and integral.

In mechanics: action and reaction.

In physics: positive and negative electricity.

In chemistry: the combination and dissociation of atoms.

In social science: the class struggle.

The [identity of opposites](#) (it would be more correct, perhaps, to say their "unity,"—although the difference between the terms identity and unity is not particularly important here. In a certain sense both are correct) is the recognition (discovery) of the contradictory, *mutually exclusive*, opposite tendencies in *all* phenomena and processes of nature (*including* mind and society). The condition for the knowledge of all processes of the world in their "*self-movement*," in their spontaneous development, in their real life, is the knowledge of them as a unity of opposites. Development is the "struggle" of opposites. The two basic (or two possible? Or two historically observable?) conceptions of development (evolution) are: development as decrease and increase, as repetition, *and* development as a unity of opposites (the division of a unity into mutually exclusive opposites and their reciprocal relation).

In the first conception of motion, *self*-movement, its *driving* force, its source, its motive, remains in the shade (or this source is made *external*—God, subject, etc.). In the second conception the chief attention is directed precisely to knowledge of the source of “*self*”- movement.

<https://www.marxists.org/archive/lenin/works/1915/misc/x02.htm>

The excerpt is from Volume 38 of Lenin’s *Collected Works*.

JK: Lenin’s observations have been widely taken as a deepening of Engels’ remarks and indeed, Marxists in Russia (and elsewhere) were reluctant to differ with the person who led the first successful Marxist revolution.

In the years following Lenin’s death in 1924, a variety of opinions on dialectics were put forward. We will see examples of these and practical applications of dialectics in later chapters.

Here I will continue with just one more approach to dialectics, one which helped guide the Chinese Communist Party in its 25-year-old struggle to transform itself from a tiny group into a formidable force, defeat the Japanese, vanquish the Kuomintang and eventually win power.

It was not by discussing philosophies of revolution that the Chinese succeeded. It is true that they studied and learned Marxism -- from the Russians. But it was in applying dialectics, and making many mistakes in doing so, that the Chinese succeeded. It was not by discussing Marxist philosophy or generating revolutionary programs. For, as Marx wrote:

The question whether objective truth can be attributed to human thinking is not a question of theory but is a practical question. Man must prove the truth — i.e. the reality and power, the this-sidedness of his thinking in practice. The dispute over the reality or non-reality of thinking that is isolated from practice is a purely scholastic question. - *Theses on Feuerbach*

<https://www.marxists.org/archive/marx/works/1845/theses/theses.htm>

When I first read this thesis, it resonated very strongly with me; I think it is one of the most powerful things Marx ever wrote, and we will encounter it several times in this Sourcebook.

One implication is that we should never judge an approach to dialectics on academic or purely “philosophical grounds.” We should judge by whether it succeeds in practice.

Another implication is that it calls into question the usefulness of what is traditionally thought of as philosophy. You know, the questions that philosophers have been arguing about for 2000 years -- like the relationship between thinking and being, Idealism vs. Materialism, the basic substance of the world, how the world came into being, how we know the world, and many more. My opinion is that philosophy has been useful in making revolutions, no doubt about it, but...how to put it?...academic philosophy has excesses and it has rehashed the same issues for centuries, always seeking to find novelty -- and since it was dethroned -- is desperate to *matter*, to be *relevant*. I think the academy needs trimming.

Turning to **Mao Zedong**, his essays *On Contradiction*, *On Practice*, and *On the Correct Handling of Contradictions* became classics not only in China but worldwide. Here is the Conclusion from *On Contradiction*:

We may now say a few words to sum up. The law of contradiction in things, that is, the law of the unity of opposites, is the fundamental law of nature and of society and therefore also the fundamental law of thought. It stands opposed to the metaphysical world outlook. It represents a great revolution in the history of human knowledge.

According to dialectical materialism, contradiction is present in all processes of objectively existing things and of subjective thought and permeates all these processes from beginning to end; this is the universality and absoluteness of contradiction.

Each contradiction and each of its aspects have their respective characteristics; this is the particularity and relativity of contradiction. In given conditions, opposites possess identity, and consequently can coexist in a single entity and can transform themselves into each other; this again is the particularity and relativity of contradiction.

But the struggle of opposites is ceaseless, it goes on both when the opposites are coexisting and when they are transforming themselves into each other, and becomes especially conspicuous when they are transforming themselves into one another; this again is the universality and absoluteness of contradiction.

In studying the particularity and relativity of contradiction, we must give attention to the distinction between the principal contradiction and the non-principal contradictions and to the distinction between the principal aspect and the non-principal aspect of a contradiction; in studying the universality of contradiction and the struggle of opposites in contradiction, we must give attention to the distinction between the different forms of struggle. Otherwise we shall make mistakes.

If, through study, we achieve a real understanding of the essentials explained above, we shall be able to demolish dogmatist ideas which are contrary to the basic principles of Marxism-Leninism and detrimental to our revolutionary cause, and our comrades with practical experience will be able to organize their experience into principles and avoid repeating empiricist errors. These are a few simple conclusions from our study of the law of contradiction.

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_17.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_17.htm)

JK: We will examine more ideas about the theory and practice of dialectics in the next chapter, then turn to criticisms of dialectics in Chapter 3. For those wishing to read more about Mao's views on this subject, here are some extensive extracts.

#### **Mao, Talks at Chengtu. March 10, 1958**

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_06.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_06.htm)

We must cite abundant examples, put forward several dozen or a hundred examples in order to explain the concepts of the unity of opposites and their transformation into one another. Only thus can we correct our ideology and raise our level of understanding. Spring, summer, autumn and

winter are also transformed into one another. Elements of spring and summer are contained in autumn and winter. Birth and death are also transformed into one another. Living is transformed into dying, lifeless matter is transformed into living beings. I propose that when people over the age of fifty die, a party should be held to celebrate, for it is inevitable that men should die, this is a natural law. Grain is an annual plant, every year it is born once, and dies once; moreover, the more that dies, the more that is born.

...The *Concise Philosophical Dictionary* makes a specialty of opposing me. It says the transformation of birth into death is metaphysical, and the transformation of war into peace is wrong. In the last analysis, who is right? Let me ask: if living beings do not result from the transformation of inanimate matter, where do they come from? In the beginning, there was nothing but inorganic matter on earth; organic matter appeared only subsequently. All living substances result from changes in twelve elements such as nitrogen and hydrogen. All living beings result from the transformation of inanimate matter.

Sons are transformed into fathers, fathers are transformed into sons; women are transformed into men, men are transformed into women. Such transformations cannot take place directly, but, after marriage, sons and daughters are born; is this not transformation?

The oppressors and the oppressed are transformed into one another, as in the relations between bourgeoisie and landlords on the one hand, and workers and peasants on the other. Naturally, when we talk about these oppressors, we are referring to the old ruling classes, it is a matter of class dictatorship and not of individual oppressors.

War is transformed into peace, peace is the opposite of war. When there had been no fighting, that was peace; as soon as the 38th Parallel was crossed, that was war, and as soon as the armistice was concluded, that was peace again. Military affairs are politics under particular circumstances, they are the continuation of politics; politics is also a kind of war.

To sum up, quantitative changes are transformed into qualitative changes, and qualitative changes are transformed into quantitative changes. Europe is heavily infested with dogmatism, and the Soviet Union has some shortcomings, but all of this is bound to change, and **if we don't do our work well, we can become rigid again. If, at such a time, our industry has become number one in the world, we might grow cocky, and then our thinking might ossify.** [emphasis added]

The finite is transformed into the infinite, the infinite is transformed into the finite. The dialectics of ancient times was transformed into the metaphysics of the Middle Ages, and the metaphysics of the Middle Ages was transformed into the dialectics of modern times. The universe, too, undergoes transformation, it is not eternal. Capitalism leads to socialism, socialism leads to communism, and communist society must still be transformed, it will also have a beginning and an end, it will certainly be divided into stages, or they will give it another name, it cannot remain constant. If there were only quantitative changes and no qualitative changes, that would go against dialectics. There is nothing in the world that does not arise, develop, and disappear. Monkeys turned into men, mankind arose; in the end, the whole human race will disappear, it may turn into something else, at that time the earth itself will also cease to exist. The earth must certainly be extinguished, the sun too will grow cold — it is already much cooler than it was in ancient times.



During the ice age, there was one change in two million years. When the ice came, a large part of all living creatures perished. Beneath the South Pole there is a great deal of coal, so you can see that in ancient times it was very warm there. In Yen-ch'ang *hsien* they have discovered petrified bamboo. (An author of the Sung dynasty said that bamboo grew in Yen-ch'ang in ancient times, but now it can't.)

All things must have a beginning and an end. Only two things are infinite: time and space. The infinite is made up of the finite. All things of whatever kind develop and change step by step.

JK: How does Mao know that “time” and “space” are infinite? He doesn't. In fact, physicists are now questioning whether time and space are even fundamental. One theory is that the amplituhedron, a geometrical figure, will be a component (along with equations) that plumbs reality more deeply. Later we will see that quantum physicist David Bohm offers radical ideas that also question time and space as fundamental constituents of reality.

**Mao, *Speeches at the Second Session of the Eighth Party Congress May 8-23, 1958***

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_10.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_10.htm)

**When we become a modernized, industrialized and highly cultured great power 15 years hence, we may possibly become too cocky and raise our tail sky high.** [emphasis added]

...The dialectics of Greece, the metaphysics of the Middle Ages, the Restoration. . . . It is the negation of negation.

...When we say setting up the opposite, it does not mean setting up something not in objective existence. The so-called opposite can only be set up when it is in objective existence. What is not in objective existence cannot be set up.

JK: This seems a very important point, which is seldom commented on. Mao holds that opposites are there and will appear, that this must be recognized, prepared for, and dealt with. In short, he is referring to how one goes about dealing with the contradictions that will of necessity appear in society, whether a socialist society, capitalist, or some other form. And these opposites must be “set up,” apparently meaning allowed to thrive. The 1956 slogan, “Let 100 Flowers bloom!” would seem to be an example of this.

[https://en.wikipedia.org/wiki/Hundred\\_Flowers\\_Campaign](https://en.wikipedia.org/wiki/Hundred_Flowers_Campaign)

Mao continues:

...The Japanese in Peking apologized to me for attacking us. I said: you did a good deed. Precisely because of your invasion and occupation of more than half of China we were able to unite, lead the people of the entire nation to chase you away and come to Peking.

...Dialectics should develop in China. We are not concerned about other places; we are concerned about China. What we do are (sic) more compatible with dialectics and with Lenin, but not very compatible with Stalin. Stalin said that the socialist society's production relations completely conformed to the development of the production force; he negated contradictions. Before his death, he wrote an article to negate himself. He stated that complete conformity did not indicate the

absence of contradictions and that improper handling could develop into antagonistic contradictions. One couldn't say that he lacked dialectics. He had some. While there were superstition and one-sidedness, his method did succeed in building socialism, defeating the enemy, producing 50 million tons of steel, possibly 55 million tons this year and in putting three satellites in orbit. His was one kind of method. Can we find another method?

**Mao, *Examples of Dialectics (Abstracted Compilation)* (1959)**

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_48.htm#:~:text=Dialectics%20is%20to%20Present%20Two,of%20opposites%2C%20which%20is%20dialectics](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_48.htm#:~:text=Dialectics%20is%20to%20Present%20Two,of%20opposites%2C%20which%20is%20dialectics)

page 2. Dialectics is to Present Two Methods for Comparison in Everything

The integration of the universal truth of Marxism-Leninism and the specific practice of China is materialism. Both are the unity of opposites, which is dialectics. Why insist on arguing? It is simply to avoid discussing dialectics. The Soviet Union has its own way of doing things. The Soviet experiences are one side and China's practice is also one side. This is the unity of opposites. The Soviet Union should pick the good ones from among its experiences and follow them, pick the bad ones and discard them. To isolate the Soviet experiences and not integrate them with the Chinese practice is not to pick the good experiences and follow them. If one publishes a newspaper and argues in the same way as *Pravda*, which is not analytical, he will be like a 3-year-old child, which needs support everywhere, inasmuch as it has lost its independent thinking. **In everything, it is necessary to present two methods for comparison.** This is dialectics. Otherwise, it will be metaphysics.

JK: Bolded text refers again to a point rarely discussed -- a specific way to approach and deal with contradictions.

#### 6. Correct Line is Formed in the Course of Struggle with Incorrect Line

Mistakes will still be made. It is impossible not to make mistakes. To make mistakes is an indispensable prerequisite to the formation of a correct line. A correct line is spoken of in regard to an incorrect line. The two of them are the unity of opposites. A correct line is formed in the course of struggle with an incorrect line.

#### 7. Things will Invariably Head Toward Their Opposites

Things will invariably head toward their opposites. The dialectics of Greece, the metaphysics of the Middle Ages, and the Renaissance. It was a negation of negation. China was also like this. The contention of one hundred schools of thought in the period of Warring States was dialectics and the classical learning of the feudal times was metaphysics. Now we have returned to talking about dialectics, is it not? [have we not?] Comrade Fan Wen-Lan, you are well acquainted with this. The way I look at it is that after 15 years, our tail will definitely be wagging in the air. Of course, because things will head toward their opposites, I cannot but exert my utmost efforts. Even if big-nation chauvinism emerges in the future, it will also head toward its opposite. If there is one correct thing that will substitute for big-nation chauvinism, what is there to fear? It is not possible for all socialist countries to become chauvinistic. Lenin's dialectics, Stalin's metaphysics and present-day dialectics. All this is also a negation of negation.

12. Putting a factory into operation is also an artificially established opposite. The An-shan Steel Mill was constructed by the Japanese. The Ch'ang-ch'un Motor Vehicle Plant was new. It is an opposite established by the people. **What nature does not have can be built artificially, but there must be a material basis.** [Emphasis added]

### 13. To Establish Opposites is Very Important

The initiative of the masses exists objectively. It is very important to establish opposites. If we allow the rightists to turn loose or speak up, it is according to plan. We do this in order to establish opposites. After the Rectification Campaign, some comrades overlooked rectification and remolding and laid stress on big-character wall newspaper and the 2-anti movement [against waste and conservatism] for the purpose of establishing opposites. So-called opposites can only be established if they are things which exist objectively. Things which do not exist objectively cannot be established as opposites.

### 16. It is Necessary to Adopt Dialectical Methods to Treat Our Comrades

Lenin once said that there is not even one person in the whole world who has not made a mistake. I have committed many mistakes. These mistakes have been useful to me and have educated me.

...It looks as if once we enter into communism, it won't do unless we are 100 percent Marxists. In reality, there are various shades of Marxists. There are 100 percent Marxists, 90 percent Marxists, 70 percent Marxists, 60 percent Marxists, 50 percent Marxists. Some people are only 10 percent or 20 percent Marxists.

### Talks With Mao Yüan-hsin (2) 1966

[https://www.marxists.org/reference/archive/mao/selected-works/volume-9/mswv9\\_51.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-9/mswv9_51.htm)

When one lectures on nuclear physics it will suffice to talk about the Sakata model; one needn't start from the theories of Bohr of the Danish school; otherwise you won't graduate even after ten years of study. Even Sakata [a Marxist Japanese physicist] uses dialectics--why don't you use it?

...Man's understanding of things always starts from the concrete and proceeds to the abstract. In medicine they start by teaching abstract things such as psychology, the nervous system, etc. I think this is wrong: they should start by teaching anatomy. Mathematics was originally derived from physical models. Nowadays one cannot associate mathematics with physical models: instead one has gone a step further and made it abstract.

...What do we mean by advanced? To be advanced is to do the work of the backward, to analyse those who are around us, to be intent on making inquiries and making friends wherever we go. Our young people must study dialectics, and master the use of dialectics in analysing problems. Take me, for example. I am not at all more intelligent than others, but I understand dialectics and I know how to use it in analysing problems. If we use dialectics to analyse an unclear problem, the problem becomes clear in a trice. You must diligently study dialectics, its efficacy is very great.

JK: The following is a long document outlining the history of the Chinese Communist Party. It adopts a critical attitude toward Mao's contributions.

*Resolution on certain questions in the history of our party since the founding of the People's Republic of China* (Adopted by the Sixth Plenary Session of the Eleventh Central Committee of the Communist Party of China on June 27, 1981)

<https://www.marxists.org/subject/china/documents/cpc/history/01.htm>

At the Tenth Plenary Session of the Party's Eighth Central Committee in September 1962, Comrade Mao Zedong widened and absolutized the class struggle, which exists only within certain limits in socialist society, and carried forward the viewpoint he had advanced after the anti-Rightist struggle in 1957 that the contradiction between the proletariat and the bourgeoisie remained the principal contradiction in our society. He went a step further and asserted that, throughout the historical period of socialism, the bourgeoisie would continue to exist and would attempt a comeback and become the source of revisionism inside the Party.

JK: As mentioned previously, China now has billionaires. Not one but a lot! The plan is to keep going this way for 100 or 200 years. I'd say there are clear signs that the new bourgeoisie is winning.

Gemini (Google AI):

The exact number of billionaires in China can vary depending on the source and methodology used. However, here are two reputable sources with different estimates:

- **Hurun Global Rich List 2023:** This list estimates **969 billionaires** residing in China.
- **Forbes:** As of April 2023, Forbes reported **495 billionaires** in mainland China. This figure does not include billionaires from Hong Kong and Macau.

Therefore, the approximate range for the number of billionaires in China is between 495 and 969. It's important to note that these numbers can fluctuate based on real-time changes in stock prices and other factors affecting wealth.

[Continuing the 1981 CCP document]

1) After socialist transformation was fundamentally completed, the principal contradiction our country has had to resolve is that between the growing material and cultural needs of the people and the backwardness of social production.

4) Class struggle no longer constitutes the principal contradiction after the exploiters have been eliminated as classes. However, owing to certain domestic factors and influences from abroad, class struggle will continue to exist within certain limits for a long time to come and may even grow acute under certain conditions.

JK: How can the CCP say that “the exploiters have been eliminated as classes”? How did the 900+ billionaires become so without exploiting the working class? We can safely say that Mao would not agree with their statement of the principal contradiction since he asserted that “throughout the historical period of socialism, the bourgeoisie would continue to exist and would attempt a comeback and become the source of revisionism inside the Party.” From the vantage point of 2024, isn't that what has happened?

## Further sources

There are thousands of explanations of dialectics from a great variety of standpoints. For example, see Chapter 4, **Levins and Lewontin**, *The Dialectical Biologist, Conclusion: Dialectics*. The two outstanding biologists present their understanding of dialectics in relation to biology, and all of life, in detail and with examples. Excerpts from their book appear in Chapter 4 of this Sourcebook.

**Marxist Internet Archive (MIA)**, *Encyclopedia of Marxism, Dialectical Materialism*  
<https://www.marxists.org/glossary/terms/d/i.htm#dialectical-materialism>

**Hegel, Georg F.W.** Definitions of dialectics, examples in nature and much more.  
<https://www.marxists.org/reference/archive/hegel/help/sampler.htm>

**Lenin** Disagreement with Nikolai Bukharin over what a (drinking) glass is  
<https://www.marxists.org/archive/lenin/works/1921/jan/25.htm>

**Kautsky, Karl** on dialectics  
<https://www.marxists.org/archive/kautsky/1927/abstract/mch-abs.htm>

Four 20<sup>th</sup> Century revolutionaries who used dialectics to guide their revolutionary practice: **Sison, Majumdar, Sanmugathasan, Jackson**

**Sison, Jose Maria**, *Basic Principles of Marxism Leninism*, Foreign Language Press (Paris, printed 2020).

JK: Written “three decades ago.” Has four volumes of Sison’s *Selected Works*. Stands with Engels on three laws of dialectics but says they are summed into one. That is, it appears he wants to have it both ways. Doesn’t cite Mao’s reduction of Engels’ three laws into one “law.”

**Sison, Jose Maria**, *On the Philosophy of Marxism-Leninism-Maoism* (2021).  
<https://foreignlanguages.press/colorful-classics/basic-principles-of-marxism-leninism-a-primer-jose-maria-sison/>

JK: Interview on the relation between the ideal and the material. Contra the Frankfurt School. Strongly supports Mao. Hold that China is no longer socialist. Cites Mao’s view that there is only one law of dialectics. Sison takes a different tack on the ‘basic laws’ of dialectics here - e.g. Lenin on just one law. Discusses criticisms by Badiou and Žižek.

p 385 Sison revisits questions of Dialectical Materialism. Simpler than his earlier presentation. Asked to give examples of negation, he cites water to ice to steam.

Wikipedia:

**Jose Maria Canlas Sison** (February 8, 1939 – December 16, 2022), also known as **Joma**, was a Filipino writer, poet, and activist who founded and led the [Communist Party of the Philippines](#) (CPP) and added elements of [Maoism](#) to its philosophy—which would be known as [National Democracy](#). His ideology was formed by applying [Marxism–Leninism–Maoism](#) to the history and circumstances of the Philippines.

**Charu Majumdar**, *Disinterring the Transition Debate in Maoist China* (2018)

page 11 Liu Shao-chi on the principal contradiction in China at certain stage - it's an economic contradiction. Contrast with Mao on the principal contradiction (1952).

22 Deng's "novel principal contradiction". "Deng displaced the principle (sic) contradiction of the Chinese society from class struggle between the proletariat and bourgeoisie to that 'between the ever-growing material and cultural needs of the people and backward social productivity'" (Haacke & Preston, 2013, p. 9).

23 Xi Jinping's principal contradiction: "till the contemporary period where the current president Xi Jinping (2017) defined 'the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life' as the new principal contradiction of Chinese society."

Wikipedia:

**Charu Majumdar** (15 May 1918 – 28 July 1972), popularly known as **CM**, was a Communist leader from India, and founder and General Secretary of the [Communist Party of India \(Marxist-Leninist\)](#).<sup>[1]</sup> Born into a progressive landlord family in Siliguri in 1918, he became a Communist during the [Indian Independence Movement](#), and later formed the militant [Naxalite](#) cause. During this period, he authored the historic accounts of the 1967 [Naxalbari uprising](#). His writings, particularly the [Historic Eight Documents](#), have become part of the ideology which guides the insurgencies.

Encyclopedia of Anti-Revisionism On-Line:

<https://www.marxists.org/history/erol/sri-lanka/index.htm>

### **Nagalingam Sanmugathan**

The dominant figure in Sri Lankan Maoism was Nagalingam Sanmugathan, a founder and one-time leader of the Ceylon Communist Party (CCP). A Tamil born in Manipay, Jaffna District, Sanmugathan had been a student leader at University College Colombo. He later headed the Ceylon Trade Union Federation (CTUF), playing an important role in several strikes, including the general strike of 1947, the Hartal (general strike) of 1953, and a transport strike in 1955. A Politburo member identified with pro-Chinese positions he was expelled from the Ceylon Communist Party in 1963, after having gone to Peking for talks that May and returned to organize anti-revisionist rallies, publish pamphlets and distribute Chinese polemics.

### **Jackson, T.A. (Communist Party, Great Britain)**

<https://www.marxists.org/archive/jackson-ta/1936/dialectics/index.htm>

Wikipedia:

**Thomas Alfred Jackson** (21 August 1879 – 18 August 1955) was a founding member of the [Socialist Party of Great Britain](#) and later the [Communist Party of Great Britain](#). He was a leading [communist](#) activist and newspaper editor and worked variously as a party [functionary](#) and a freelance lecturer.

## Others (writers, philosophers):

**Andersen, Kevin**, International Socialist review of his *Centrality of Dialectics*

JK: a defense of dialectics against 20<sup>th</sup> C and later theorists including Marxists - Dewey, Derrida, Rorty. Andersen more or less ignores the materialism in Marxism, this reviewer says.

<https://newpol.org/review/the-centrality-of-dialectics-in-marxist-theory-and-politics/>  
<http://isj.org.uk/dialectics-liberation/>

Criticism of many modern thinkers who dismiss dialectics.

**Blunden, Andy**, *Vygotsky and the Dialectical Method* (1997)

<https://www.marxists.org/archive/vygotsky/works/comment/vygotsk1.htm>

**Clapp, Robin**, *Introducing Marxism - Dialectical Materialism* (2022)

On Marx & Engels three laws of dialectics. With examples.

<https://socialismtoday.org/introducing-marxism-dialectical-materialism>

**DeGenova, N.** *Toward a Marxian Anthropology* (2016) from *Dialectical Anthropology* (a journal)

<https://www.springer.com/journal/10624>

JK: There are far worse, but DeGenova provides this example of pretentious Marxademic-speak:

What figures for Marx as labor—in its ontological, transhistorical sense—is the practical expression of species being, and it is precisely this that comes to be alienated and estranged within capitalist social relations (1844 [1964:106–19]). Similarly, the ‘pure potentiality’ that is not reducible to any particular operation, identity, or vocation, which Agamben identifies with the specificity of the human, may be understood to be the positivity that comes to be banned by sovereign (state) power as bare life. Thus, bare life is activated as a negative foil for the ever opened universality of the human species, in contradistinction to and unrelenting separation from the plenitude of particular juridically inscribed identities. In effect, when Agamben depicts the separation of social life from the ostensibly “natural”/“animal”/“biological” life of the human species, he is describing a condition of political–juridical estrangement. Bare life is the figure that operates as a condensation of that relation of distinctly political alienation. It can be taken to be the specifically political complement to Marx’s analysis of estranged labor.

JK: Whew!!

**Jameson, Fredric** *Representing Capital* (2011)

The first two chapters deal with the dialectics of Hegel and Marx. E.g. “The Unity of Opposites”. *Nick Knight’s Discussion of Mao’s Supposed Rejection of the Concept of the “Negation of the Negation”*

[JK: Note by Jameson:]

This is a section from the introductory chapter of Nick Knight’s book, *Mao Zedong on Dialectical Materialism: Writings on Philosophy*, 1937 (M.E. Sharpe, Inc., 1990), a book which consists mostly of Mao’s own philosophical writings. A couple clarifying additions have been inserted in brackets. –Ed.

<https://massline.org/Philosophy/Others/Knight-Mao-NegOfNeg.pdf>

**Maher, George**, *On Dialectics: Decolonizing Dialectics* (Radical Américas)

Reviews:

<https://krissealey.com/decolonizing-dialectics-review/>

<https://www.dukeupress.edu/decolonizing-dialectics>

[https://marxandphilosophy.org.uk/reviews/8258\\_decolonizing-dialectics-review-by-joshua-moufawad-paul/](https://marxandphilosophy.org.uk/reviews/8258_decolonizing-dialectics-review-by-joshua-moufawad-paul/)

[https://ijp.tamu.edu/?page\\_id=877](https://ijp.tamu.edu/?page_id=877)

<https://www.degruyter.com/document/doi/10.1515/9780822373704/html?lang=en>

<https://abolitionjournal.org/breaking-bricks-george-ciccariello-mahers-decolonizing-dialectics-friendly-engagements-reflections/>

**McKinney, Ronald H.**, *The Origins of Modern Dialectics*, *Journal of the History of Ideas* Vol. 44, No. 2 (Apr. - Jun., 1983), pp. 179-190.

**Wilde, Lawrence** *Logic: Dialectic and contradiction* (1991)

JK: on Marx's understanding of dialectics. Clear and useful.

<https://www.marxists.org/reference/subject/philosophy/works/en/wilde1.htm>

<https://www.marxists.org/reference/subject/philosophy/works/en/wilde.htm>



## Chapter 2 Approaches to Dialectics in Marxist Movements

The implementation of dialectics by Marxist revolutionaries varies a great deal, as would be expected. In this chapter I will focus on those approaches which use Mao Zedong's notion of the "principal contradiction" (PC). But before discussing the PC, let's note some of the other approaches by Marxist revolutionaries in using dialectics to make revolutions in the very specific conditions in their countries.

Let's start with **Amilcar Cabral (Guinea), Samora Machel (Mozambique), and José Carlos Mariátegui (Peru)**.

**Amilcar Cabral**, *Connecting the Struggles, an informal talk with Black Americans*, Oct 20, 1972, New York City  
[https://abahlali.org/wp-content/uploads/2016/12/amilcar\\_cabral\\_return\\_to\\_the\\_source-ilovepdf-compressed.pdf](https://abahlali.org/wp-content/uploads/2016/12/amilcar_cabral_return_to_the_source-ilovepdf-compressed.pdf)

QUESTION : Comrade Cabral, you spoke about universal scientific laws of revolution. It is very clear that in this country, we too, are engaged in some stage of development of a revolutionary struggle. Certainly one of the most controversial aspects of our struggle is the grasp of these scientific universal laws. Would you, therefore, talk about your Party's understanding of revolutionary theory, particularly as related to Cuba, China, the Soviet Union, and the anti-colonial wars of national liberation? It is very clear that on the international level there are defined positions being taken that are probably more important in countries, and with parties, which have defined positions than they are in our struggle which is so fractured that we play little part in this international struggle for the clarification of these universal scientific laws. So I wonder, would you speak on this problem?

CABRAL: You see, I think that all kinds of struggle for liberation obey a group of laws. The application of these laws to a certain case depends on the nature of the case. Maybe all these laws are applicable, but maybe only some, maybe only one, it depends. In science you know water boils at 100<sup>0</sup> C. It's a law. Naturally, with the condition that we are speaking in centigrade degrees, this is a specification. What does it mean if we are measuring Fahrenheit -- it's not the same. And this is also only at sea level. When you go up in the mountains this law is not true. Newton and many others told us it is the same but Einstein demonstrated that it is not always true. It is sometimes more complex.

It's the same in the field of the scientific character of the liberation struggle. Cuba, Soviet Union, China, Viet Nam, and so on -- our country, are different entities in this context. Sometimes you can even explain conflicts between their people because of the different nature of their struggle, dictated by the different conditions of the countries -- historical, economical, and so on.

I have to tell you that when we began preparing for our struggle in our own country, we didn't know Mao Tse-tung. The first time I faced a book of Mao Tse-tung was in 1960. Our party was created in 1956. We knew less about the struggle of Cuba, but later we tried to know the experiences of other peoples. Some experiences we put aside because the difference was so great that it would waste time to study them. We think the experiences of other people are very important

for you, principally to know things you should not do. Because what you have to do in your country you have to create yourself.

The general laws are very simple. For instance, the development of the armed fight in a country characterized by agriculture where most, if not all, of the population are peasants means you have to do the struggle as in China, in Viet Nam or in my country. Maybe you begin in the towns, but you recognize that this is not good. You pass to the countryside to mobilize the peasants. You recognize that the peasants are very difficult to mobilize under certain conditions, but you launch the armed struggle and step by step you approach the towns in order to finish the colonists.

For instance, this is scientific: in the colonial war there is a contradiction. What is it? It is that the colonial power in order to really dominate the country has to disperse its forces. In dispersing its forces it becomes weak - the national forces can destroy them. As you begin to destroy them they are obliged to concentrate, but when they concentrate they leave areas of the country you can control, administer and create structures in. Then they can never destroy you. It's always possible. You can tell me it's not possible in the United States, the United States is not an agricultural country like this. But if you study deeply the conditions in your country maybe you will find that this law is also applicable. This is what I can tell you, because it is a very big problem to discuss, if I understood your question.

JK: Although Cabral does refer to the “principal contradiction” at least once, he does not feature it in his speeches and writings.

**Bernard Magubane, *Amilcar Cabral: Evolution of Revolutionary Thought***

Modern anti-colonial movements have been revolts against the political system of foreign exploitation, in which the national question could be resolved only by political independence. Cabral has redefined the situation in Guiné as one of foreign exploitation in which the national question could only be resolved by structural change which also implies profound mutation in the productive forces.

To redefine the situation Cabral did original research and used the Marxist dialectical method. Most of the people of Guiné, despite 400 years of Portuguese presence, still live in folk communities (I use the word 'folk' rather than 'tribal' because it embodies cultural and economic meanings whilst the word 'tribal' emphasizes elements of barbarism). The essential aspect of the dialectical method as developed by Marx is an analysis of reality without isolating it either from its process of formation or from the general context of the macro-structure within which it is inserted. Cabral has been able, through this approach, to throw light on such questions as economic and social development, the growth of classes and class conflict, and on such elements of the 'super-structure' as religion, 'tribalism', authority systems (particularly the state), etc. in Guiné. This enables us for the first time to know what kind of contradiction the party had to resolve before launching the armed struggle. Cabral's anthropological method differs with those of non-Marxists. It is based on the materialist understanding of social life.

...Cabral's refusals are based on the 'labor theory of social origins', which is based on concrete knowledge of the socio-economic reality of Guiné and Africa's pre-capitalist social formations. The dialectical materialistic approach of class formation led him to his conclusions.

*---if class struggle is the motive force of history, it is so only in specific historical periods...It therefore seems correct to conclude that the level of productive forces, the essential determining element is the content and form of class struggle, is the true and permanent motive force of history. (p. 77)*

JK: Cabral's analysis led him to assert that the specific conditions in Guiné (Guinea) called for rejection of what most Marxist-Leninists had asserted; namely, that class struggle was the "essential determining element" in historical development. According to Cabral, this proved not to be the case in Guiné.

**Samora Machel**, *The People's Democratic Revolutionary Process in Mozambique - The Question of Ideology in a Broad Front*

[https://archive.org/stream/samoramachelspeechesandwritings/samoramachelspeechesandwritings\\_djvu.txt](https://archive.org/stream/samoramachelspeechesandwritings/samoramachelspeechesandwritings_djvu.txt)

p6 in text

Our strategy and tactics, although deriving enormous benefit from the theoretical and practical experience of other revolutionary struggles, are more than anything else a product of our own struggle, of the particular military, economic, cultural and social conditions we encounter in our country.

42 The net effect of these questions raises the issue of the role and need of ideology for revolutionary development. The classic assertion that without revolutionary theory there can be no revolutionary practice is amply confirmed by our experience. But our practice does offer some original features in this sphere, in particular how a broad front without an established vanguard party relates to revolutionary ideology.

To avoid any confusion it should be stated that the absence of a vanguard party from the broad front is not a result of a premise in our analysis or an aim or even a strategy of ours. It is the result of a web of historical circumstances we face, with characteristics including basically the non-existence of an organized working class and tradition, the lack of struggle experience by the broad masses, the burden of reactionary traditions and concepts imposed on the people by feudal and colonial domination, the isolation of communities, particularly in the countryside, before the founding of the nationalist movement, which has deprived us of the theoretical and practical experiences of the world revolutionary movement.

43 The political line, the ideology, arise as guidance for the specific problems raised by the development of the struggle and required for the progress of the whole process. The concrete needs we faced and still face just to replace obsolete loyalties to tribe, language, religion and culture with national unity and with a sense of belonging to an immense, exploited working class, to give a clear definition of the enemy and to make the masses conscious of its exploitative character, and hence to distinguish unambiguously our ideas, values, aims, methods and behaviour from those of the enemy.

46 Mozambique is essentially a rural country, where more than 90 percent of the African population live in non-urban areas. The urban areas are principally populated by settlers and were planned in such a way as to isolate and easily contain the African population found there. Hence the rural areas are easy for us to approach, while the urban areas, tightly controlled by the enemy, demand more time and energy-consuming work by the cadres and rapidly eat up the efforts of a large number of those cadres.

This explains our priority for struggle in the rural areas and why in the present phase we have not paid much attention to urban guerrilla activity. Although such activity would be spectacular, it would be fatal for us, above all for the heavy cost it would take in cadres.

*From Every Revolution Is a Contribution to Marxism*

106 The accumulated experience of mankind in the struggle against exploitation, synthesized in Marxism, enabled the Mozambican revolutionary movement to benefit from and absorb that experience. In the process Marxism was enriched.

Under Mozambique's conditions, revolutionary practice led us to give pride of place to socialist revolution, and led us to launch the process of building socialism in a context of widespread illiteracy, a narrow working class and in the absence of an established Marxist-Leninist party. The struggle by Mozambican workers, under the leadership of the vanguard nucleus generated by the Liberation Front, enabled us to find correct responses to these problems.

In this sense, although each people's revolutionary experience is specific, it does not lie outside Marxist thinking.

*25 from Establishing People's Power to Serve the Masses*

The development of our revolution, the spread and consolidation of our armed struggle provoke new contradictions. Each advance brings a reaction, revolution is always opposed by counter-revolution.

The principal contradiction arising among us in the current phase is that between the demands of the situation and our capabilities. The struggle and the establishment of people's power are developing more speedily than the consciousness and capacity of cadres, who bear the burden of the task of guiding, channeling and stimulating the overall process.

The main aspect of this contradiction is visible in the inability of cadres in some centres to find their own correct answers to the different problems that crop up. It is seen in the difficulty they have in defining and planning tasks, and the failure of the centres to integrate and transform the growing numbers of personnel and the increasingly large population for which they are responsible.

JK: As above, Machel does refer to the "principal contraction" and in his writings he often refers to the "principal task" in any given situation. He stresses the particular concrete conditions which existed in Mozambique, and not in Europe or China.

## **José Carlos Mariátegui**

JK: Mariátegui wrote two books, but in neither are his views summed up in brief form. So I draw on Marc Becker's, *Mariátegui and Latin American Marxist Theory* (1993) for that purpose.

### **Becker:**

xii in text / page 11 in pdf

Mariátegui's contributions to Peru did not remain on a purely theoretical or philosophical level; he also entered politics. Mariátegui founded the Peruvian Communist Party (he called it a socialist party) in 1928 just two years before his death. Since then numerous parties on the fractionalized left, from the centrist Izquierda Unida (United Left) coalition to the Maoist Sendero Luminoso (Shining Path) guerrilla group, have invoked his name for one reason or another. In 1984 three leftist parties formed the Partido Unificado Mariáteguista (Unified Mariáteguista Party) with a statement of intent to build on national traditions in order to form an open, unified, and creative Marxist socialist force in Peru which followed the model that Mariátegui presented in the 1920s. The party believed that Mariátegui's ideology formed the strongest base for the struggle for peace and against imperialist aggression not only in Peru but throughout Latin America.

xiii / 12 in pdf

Mariátegui did not believe that Marxism was a complete philosophy. He favored a nonsectarian "open" Marxism and believed "that Marxist thought should be revisable, undogmatic, and adaptable to new situations." Rather than relying on objective economic factors to foment a revolutionary situation, Mariátegui examined subjective elements such as the need for the political education and organization of the working-class proletariat, a strategy which he believed could move a society to revolutionary action. He downplayed the passive economic determinism found in orthodox Marxism and followed a dynamic "voluntaristic conception of Marxism [which] did not allow him to wait for the economic conditions to force the peasants to act." Furthermore, he asserted that nationalism could be a revolutionary force for positive social change. Nationalism in Europe was a conservative, imperialist, reactionary, and antisocialist force, but in Latin America "nationalism is revolutionary and, therefore, it results in socialism." In addition, unlike orthodox Marxists who believed that peasants formed a reactionary class, Mariátegui looked to the peasant and indigenous masses rather than an industrialized urban working class to lead a nationalistic social revolution which he believed would sweep across Latin America.

xv / 14 in pdf Not only has the Cuban revolution indirectly inherited the intellectual influence of Mariátegui through Mella and Sandino, but its leading Marxist theorists also have acknowledged their direct debt to Mariátegui's approach to revolutionary theory. The Cuban revolution employed subjective aspects of Mariátegui's Marxism to raise the political consciousness of the Cuban people, and Guevara expanded on these ideas through his discussion of the new socialist person. Cuban political theorists have contributed to the development of a Marxist theory which is specifically applicable to the concrete social, economic, and political reality of Latin America. The Cuban revolution led leftists in other Latin American countries to reconsider the value of Marxism and to reevaluate the importance of Mariátegui in constructing an indigenous Latin American revolutionary theory.

26 / 51 in pdf

Mariátegui was one of the premier and most well-renowned Latin American Marxists to emerge out of this historical situation. He was the first Peruvian to develop a serious and systematic Marxist analysis of the problems of Latin American society and to bring a revolutionary understanding of Marxism to Latin America. Mariátegui directly challenged many of the dogmatic assumptions of the Communist International which emanated from Moscow. He wanted to develop an 'Indo-American' socialism rooted in Latin America's own historical reality. Before Mariátegui, Robert Paris has noted, Latin Americans viewed socialism and Marxism as purely European doctrines. But Mariátegui argued that 'although socialism, like capitalism, was born in Europe, it is not specifically or particularly a European doctrine. It is a world movement.' He is known, therefore, for his 'Latin Americanization' and 'spiritualization' of Marxism in which he forwarded a voluntaristic interpretation of Marxist theory that 'exalted passion as a revolutionary force.' His ability to incorporate and adapt European Marxist doctrines into a critique of Latin American society influenced a generation of Marxists struggling to change those societies, and his thoughts still continue to have relevance today.

35 / 60 in pdf

#### *Mariátegui's National Marxist Theory*

Mariátegui did not elaborate on his conception of an ideal state structure, nor did he expound on the tactics necessary to establish such a state. Although he sought to organize a legal political party, he was critical of European socialists who engaged in parliamentary politics. He cautioned against attempts to grab power militarily, but he was willing also to use violence to achieve his aims should the need arise. In polemical arguments with Peruvian Aprista leader Victor Raul Haya de la Torre, Mariátegui contended that the orthodox Marxist assumption that a bourgeois democratic revolution had to precede a socialist revolution was invalid in Latin America. Rather than building an alliance between workers and the national bourgeoisie, Mariátegui believed that a revolutionary vanguard would lead a unified working class, peasant, and indigenous proletariat toward a socialist revolution. To this end, he formed the Peruvian Socialist Party as a Leninist vanguard party, but he did not expect these organizational efforts to bear immediate results. It would take time for the peasant and working classes to gain power. The Peruvian emphasized that the revolution must emerge from the efforts of the masses as a democratic (though not necessarily electoral) process. A vanguard leadership which was distant and aloof from the proletariat would inevitably fail. Mariátegui saw the inherent danger in dogmatically applying strategies to a national situation, and he believed that specific tactics would have to be adapted to a changing cultural context. This fluid application of political strategies to the reality of the Peruvian political situation is a witness to his ability to work freely and openly with his Marxist ideas.

Mariátegui freely employed a Marxist materialism, which depicted history as moving through a series of stages: from a communal or tribal society through feudalism and capitalism on the way to a communist society. Mariátegui understood that Peruvian society had its roots in the ancient communism of the Inca empire. The Spanish conquest of the sixteenth century introduced a feudal order into Peru. After independence from Spain in the nineteenth century, northern European economic inroads along the coast introduced capitalism into the country. Mariátegui did not believe, however, that Peru had been completely integrated into a capitalistic system. Rather, Mariátegui concluded, Peru had evolved into a very backward situation with the simultaneous existence of three different economies. Remnants of the Inca communal economy still existed in

the Andes, while feudalistic remains from the colonial era persisted in the land-holding patterns, and a bourgeois economy was growing along the coast. Peru's economy continued to be underdeveloped and export oriented with an unhealthy dependency on the international capitalist market. Mariátegui looked for a solution to move Peruvian society to Marx's fourth, and final, stage of communism. To do this, Mariátegui believed that Peru needed to break its dependency on foreign capital, orient production toward the internal development of the country, and incorporate the isolated indigenous population into Peru's national culture.

While Mariátegui began with a Marxist class analysis of Peruvian society, his genius can be found in his ability to work out the implications of this for his own reality. He emphasized a nationalist, anti-imperialist, agrarian-based revolution. Mariátegui insisted that a revolutionary movement's actions be rooted in 'the concrete circumstances of a country.' Marxism was not 'a body of principles which can be rigidly applied the same way in all historical climates and all social latitudes.' Rather, Mariátegui argued, 'Marxism, in each country, for each people, works and acts on the situation, on the milieu, without overlooking any of its realities.' Mariátegui blended his European experiences and his knowledge of European philosophers such as Antonio Gramsci and Georges Sorel with his Peruvian reality in order to create what has become known as a national Marxism. He drew on European Marxist voluntarists who emphasized the role of human actors in moving society and combined their views with elements of Peruvian indigenismo thought in order to create a new and flexible Marxist methodology for Latin America. His Marxism was not nationalistic in the sense of a narrow, patriotic, parochial, or isolated world view.

JK: As we turn to the idea of the principal contradiction, here's a remarkable fact: very few who read the increasing news about the world's most populous country know that China is guided by the "principal contradiction."

What is a principal contradiction and why don't we know about it if it is so important? There are several reasons.

First off, we have heard little about China in recent years other than staple media stories such as about the Wuhan labs and COVID, President Xi's relations with the 45<sup>th</sup> US President, islands being built in the sea, and China's growth as a major economic power.

Second, we really don't hear anything about Marxism anywhere in the world – including about Mao Zedong, who developed the idea of the principal contradiction. Mao died in 1975 and was superseded by Deng Xiaoping and Xi Jinping -- who is now presented as a great leader and thinker.

We do hear a little these days about socialism in the U.S. but it is limited to the Democratic Socialism of Bernie Sanders and AOC (Alexandria Ocasio-Cortez) - and not much more than that.

As to why it's important - let's look at this idea of the "principal contradiction" to see.

The report by President Xi Jinping at the 19<sup>th</sup> Congress of the Communist Party of China proclaimed that the "principal contradiction" in China was "the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life."

This marks a change from an earlier version promoted by Deng Xiaoping in 1981 which was formulated as “between the ever-growing material and cultural needs of the people and backward social productivity.”

As noted, the notion of a principal contradiction (hereafter “PC”) stems from Mao, but the idea derives from Russian revolutionaries, particularly V.I. Lenin, based on his detailed study of the dialectics of Hegel, Marx and Engels. That is the idea that there is a “unity and struggle of opposites” in everything – which is the key idea of dialectics, according to Lenin.

As developed by Mao (and discussed in Chapter 1), there are many factors in every process and there will be one pair of opposing forces, one contradiction, which is primary. Once you determine the principal contradiction, you focus on it and you can make progress. If you don’t focus on the PC, you will not make progress. The principal contradiction has two aspects – one aspect will play the primary role and the other, the secondary role. These roles may reverse over time. After a time, a different contradiction will become the PC.

Since both Lenin and Mao were leaders of revolutionary parties which came to power after decades of struggle, it stands to reason the parties’ grasp of contradictions was a major factor in their success. Lenin, the leader of the Bolsheviks, did not use the idea of the primary contradiction, but it was from Russian sources that Mao learned that the unity and struggle of opposites was the essence of dialectics. From that basis, Mao developed the idea of the PC. The Chinese party was founded in 1922 with only 8 members and it took a long series of ideological struggles analyzing contradictions to get it right and eventually become a massive party with the strength to lead the Chinese people to power 27 years later.

Based on the history of the two largest revolutions of the 20<sup>th</sup> Century, it may be that we can learn from dialectics – analyzing social, economic and military processes through the lens of contradiction. Even if one is not sympathetic to socialism or communism – the method can be used in any political or economic situation.

To get a more of a sense of how Mao and the Chinese Communist Party understood contradictions, let’s look at Mao’s *On Contradiction*:

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_17.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_17.htm)

[For instance,] in capitalist society the two forces in contradiction, the proletariat and the bourgeoisie, form the **principal contradiction**. The other contradictions, such as those between the remnant feudal class and the bourgeoisie, between the peasant petty bourgeoisie and the bourgeoisie, between the proletariat and the peasant petty bourgeoisie, between the non-monopoly capitalists and the monopoly capitalists, between bourgeois democracy and bourgeois fascism, among the capitalist countries and between imperialism and the colonies, are all determined or influenced by this principal contradiction.

Here is how Mao (writing in *On Contradiction* in 1937) summarized the contradictions in China:

In a semi-colonial country such as China, the relationship between the principal contradiction and the non-principal contradictions presents a complicated picture.



When imperialism launches a war of aggression against such a country, all its various classes, except for some traitors, can temporarily unite in a national war against imperialism. At such a time, the contradiction between imperialism and the country concerned becomes the principal contradiction, while all the contradictions among the various classes within the country (including what was the principal contradiction, between the feudal system and the great masses of the people) are temporarily relegated to a secondary and subordinate position. So it was in China in the Opium War of 1840, the Sino-Japanese War of 1894 and the Yi Ho Tuan War of 1900, and so it is now in the present Sino-Japanese War.

But in another situation, the contradictions change position. When imperialism carries on its oppression not by war, but by milder means -- political, economic and cultural -- the ruling classes in semi-colonial countries capitulate to imperialism, and the two form an alliance for the joint oppression of the masses of the people. At such a time, the masses often resort to civil war against the alliance of imperialism and the feudal classes, while imperialism often employs indirect methods rather than direct action in helping the reactionaries in the semi-colonial countries to oppress the people, and thus the internal contradictions become particularly sharp. This is what happened in China in the Revolutionary War of 1911, the Revolutionary War of 1924-27, and the ten years of Agrarian Revolutionary War after 1927. Wars among the various reactionary ruling groups in the semi-colonial countries, e.g., the wars among the warlords in China, fall into the same category.

JK: Let's continue with extensive extracts from China's successful revolution. Eventual success was achieved at a great cost during the decades of warfare in which incorrect political lines caused many setbacks. Mao Zedong was the most successful leader during that long period and his writings have naturally been forefronted by the Chinese Communist Party.

While the situations Mao writes about are far removed from where we are today, especially in the advanced industrialized countries, his analyses of the conditions and of the political and military lines proposed and implemented provide meaningful reading and his approach should be useful in learning how to adapt the methods of analysis to contemporary struggles.

Following these extracts, I turn to specific applications of dialectics in the conditions in China following the success of the revolution in coming to power. This is largely based on a 1972 Foreign Languages Press pamphlet titled *Serving the People with Dialectics*.

**Following are extensive extracts from the Marxist Internet Archive (MIA) texts of Mao's Selected Works**

<https://www.marxists.org/reference/archive/mao/selected-works/volume-1/index.htm>

**Mao Zedong, *On Correcting Mistaken Ideas In The Party* (December 1929)**

[Begins with an explanatory note]

This article was a resolution drawn up by Comrade Mao Tse-tung for the Ninth Party Congress of the Fourth Army of the Red Army. The building of the Chinese people's armed forces was a difficult process. The Chinese Red Army (which became the Eighth Route and New Fourth Armies during the War of Resistance against Japan and is now the People's Liberation Army) was created

on August 1, 1927, during the Nanchang Uprising, and by December 1929 had been in existence for over two years. During this period the Communist Party organization in the Red army learned a great deal and gained quite a rich store of experience in the course of combating various mistaken ideas. The resolution summed up this experience. It enabled the Red Army to build itself entirely on a Marxist-Leninist basis and to eliminate all the influences of armies of the old type. It was carried out not only in the Fourth Army but also in all other units of the Red Army successively, in this way the whole Chinese Red Army became a genuine army of the people in every respect. In the last thirty years or so the Chinese people's armed forces have made tremendous developments and innovations in their Party activities and political work which now present a very different picture, but the basic line remains the same as that laid down in this resolution.

[Topics include On the Purely Military Viewpoint, On Ultra-Democracy, On The Disregard of Organizational Discipline, On Absolute Equalitarianism, On Subjectivism, On Individualism, On The Ideology of Roving Rebel Bands, On the Remnants of Putschism.]

For a brief period after the defeat of the revolution in 1927, a "Left" putschist tendency arose in the Communist Party. Regarding the Chinese revolution as a "permanent revolution" and the revolutionary situation in China as a "permanent upsurge", the putschist comrades refused to organize an orderly retreat and, adopting the methods of commandism and relying only on a small number of Party members and a small section of the masses, erroneously attempted to stage a series of local uprisings throughout the country, which had no prospect of success. Such putschist activities were widespread at the end of 1927 but gradually subsided in the beginning of 1928, though sentiments in favour of putschism still survived among some comrades.

**Mao Zedong, *On Tactics Against Japanese Imperialism* (December 27, 1935)**

[Explanatory note from the text]

This report was given by Comrade Mao Tse-tung at the conference of Party activists which was held at Wayaopao, northern Shensi, after the Wayaopao meeting of the Political Bureau of the Central Committee in December 1935. This meeting, one of the most important ever called by the Central Committee of the Communist Party of China, criticized the mistaken view in the Party that the Chinese national bourgeoisie could not be an ally of the workers and peasants in the common fight against Japan, and it decided on the tactics of a national united front. On the basis of the Political Bureau's decisions, Comrade Mao Tse-tung explained in detail the possibility and the importance of re-establishing a united front with the national bourgeoisie on the condition that there must be resistance to Japan. He stressed the decisive significance of the leading role to be played by the Communist Party and the Red Army in this united front. He pointed out the protracted character of the Chinese revolution, and criticized the narrow-minded closed-doorism and overhastiness with regard to the revolution which had long existed in the Party and which were the basic cause of the serious setbacks of the Party and the Red Army during the Second Revolutionary Civil War. At the same time, he called the Party's attention to the historical lesson of the defeat of the revolution in 1927 which had been caused by Chen Tu-hsiu's Right opportunism, and he showed that Chiang Kai-shek would inevitably try to undermine the forces of the revolution.

Thus he enabled the Party to remain clear-headed in the new situation and to save the forces of the revolution from losses, in spite of Chiang Kai-shek's endless intrigues and many armed attacks. In

January 1935, at an enlarged meeting of the Political Bureau of the Central Committee which was convened in Tsunyi, Kweichow Province, a new Central Committee leadership headed by Comrade Mao Tse-tung had been established in place of the former "Left" opportunist leadership. However, as that meeting took place during the Red Army's Long March, it had to confine itself to decisions on the most urgent military problems and on the organization of the Secretariat and the Revolutionary Military Commission of the Central Committee. Only when the Red Army had reached northern Shensi after the Long March was it possible for the Central Committee of the Party to deal systematically with the various problems of tactics in the political sphere. A most comprehensive analysis of these problems is given in this report by Comrade Mao Tse-tung.

**Mao Zedong, *Problems of Strategy in China's Revolutionary War* (December 1936)**

[Explanatory note from the text]

Comrade Mao Tse-tung wrote this work to sum up the experience of the Second Revolutionary Civil War and used it for his lectures at the Red Army College in northern Shensi. Only five chapters were completed. The chapters on the strategic offensive, political work and other problems were left undone because he was too busy in consequence of the Sian Incident. This work, a result of a major inner-Party controversy on military questions during the Second Revolutionary Civil War, gives expression to one line in military affairs as against another. The enlarged meeting of the Political Bureau of the Central Committee held at Tsunyi in January 1935 settled the controversy about the military line, reaffirmed Comrade Mao Tse-tung's views and repudiated the erroneous line. In October 1935 the Central Committee moved to northern Shensi, and in December Comrade Mao Tse-tung made a report "On Tactics Against Japanese Imperialism" in which problems concerning the political line of the Party in the Second Revolutionary Civil War were systematically solved. He wrote this work a year later, in 1936, to explain the problems of strategy in China's revolutionary war in a systematic way.

Mao:

*Chapter II. The Chinese Communist Party and China's Revolutionary War*

The Chinese Communist Party has led China's revolutionary war courageously and resolutely, and for fifteen long years has demonstrated to the whole nation that it is the people's friend, fighting at all times in the forefront of the revolutionary war in defence of the people's interests and for their freedom and liberation.

By its arduous struggles and by the martyrdom of hundreds of thousands of its heroic members and tens of thousands of its heroic cadres, the Communist Party of China has played a great educative role among hundreds of millions of people throughout the country. The Party's great historic achievements in its revolutionary struggles have provided the prerequisite for the survival and salvation of China at this critical juncture when she is being invaded by a national enemy; and this prerequisite is the existence of a political leadership enjoying the confidence of the vast majority of the people and chosen by them after long years of testing. Today, the people accept what the Communist Party says more readily than what any other political party says. Were it not for the arduous struggles of the Chinese Communist Party in the last fifteen years, it would be impossible to save China in the face of the new menace of subjugation.

Besides the errors of the Right opportunism of Chen Tu-hsiu and the "Left" opportunism of Li Li-san, the Chinese Communist Party has committed two other errors in the course of the

revolutionary war. The first error was the "Left" opportunism of 1931-34 which resulted in serious losses in the Agrarian Revolutionary War so that, instead of our defeating the enemy's fifth campaign of "encirclement and suppression", we lost our base areas and the Red Army was weakened. This error was corrected at the enlarged meeting of the Political Bureau of the Central Committee at Tsunyi in January 1935. The second was the Right opportunism of Chang Kuo-tao in 1935-36, which grew to such an extent that it undermined the discipline of the Party and of the Red Army and caused serious losses to part of the Red Army's main forces. But this error was also finally rectified, thanks to the correct leadership of the Central Committee and the political consciousness of Party members, commanders and fighters in the Red Army. Of course all these errors were harmful to our Party, to our revolution and the war, but in the end we overcame them, and in doing so our Party and our Red Army have steeled themselves and become still stronger.

### *Chapter III. Characteristics Of China's Revolutionary War*

#### *1. The Importance of the Subject*

People who do not admit, do not know, or do not want to know that China's revolutionary war has its own characteristics have equated the war waged by the Red Army against the Kuomintang forces with war in general or with the civil war in the Soviet Union. The experience of the civil war in the Soviet Union directed by Lenin and Stalin has a world-wide significance. All Communist Parties, including the Chinese Communist Party, regard this experience and its theoretical summing-up by Lenin and Stalin as their guide. But this does not mean that we should apply it mechanically to our own conditions. In many of its aspects China's revolutionary war has characteristics distinguishing it from the civil war in the Soviet Union. Of course it is wrong to take no account of these characteristics or deny their existence. This point has been fully borne out in our ten years of war.

Our enemy has made similar mistakes. He did not recognize that fighting against the Red Army required a different strategy and different tactics from those used in fighting other forces. Relying on his superiority in various respects, he took us lightly and stuck to his old methods of warfare. This was the case both before and during his fourth "encirclement and suppression" campaign in 1933, with the result that he suffered a series of defeats. In the Kuomintang army a new approach to the problem was suggested first by the reactionary Kuomintang general Liu Wei-yuan and then by Tai Yueh. Their idea was eventually accepted by Chiang Kai-shek. That was how Chiang Kai-shek's Officers' Training Corps at Lushan came into being and how the new reactionary military principles applied in the fifth campaign of "encirclement and suppression" were evolved.

But when the enemy changed his military principles to suit operations against the Red Army, there appeared in our ranks a group of people who reverted to the "old ways". They urged a return to ways suited to the general run of things, refused to go into the specific circumstances of each case, rejected the experience gained in the Red Army's history of sanguinary battles, belittled the strength of imperialism and the Kuomintang as well as that of the Kuomintang army, and turned a blind eye to the new reactionary principles adopted by the enemy. As a result, all the revolutionary bases except the Shensi-Kansu border area were lost, the Red Army was reduced from 300,000 to a few tens of thousands, the membership of the Chinese Communist Party fell from 300,000 to a few tens of thousands, and the Party organizations in the Kuomintang areas were almost all destroyed. In short, we paid a severe penalty, which was historic in its significance. This group of people called themselves Marxist-Leninists, but actually they had not learned an iota of Marxism-

Leninism. Lenin said that the most essential thing in Marxism, the living soul of Marxism, is the concrete analysis of concrete conditions. That was precisely the point these comrades of ours forgot.

Hence one can see that, without an understanding of the characteristics of China's revolutionary war, it is impossible to direct it and lead it to victory.

*Chapter IV. "Encirclement And Suppression" And Counter-Campaigns Against It --The Main Pattern Of China's Civil War*

In the period of the Li Li-san line in 1930, Comrade Li Li-san failed to understand the protracted nature of China's civil war and for that reason did not perceive the law that in the course of this war there is repetition over a long period of "encirclement and suppression" campaigns and of their defeat (by that time there had already been three in the Hunan-Kiangsi border area and two in Fukien). Hence, in an attempt to achieve rapid victory for the revolution, he ordered the Red Army, which was then still in its infancy, to attack Wuhan, and also ordered a nation-wide armed uprising. Thus he committed the error of "Left" opportunism.

Likewise the "Left" opportunists of 1931-1934 did not believe in the law of the repetition of "encirclement and suppression" campaigns. Some responsible comrades in our base area along the Hupeh-Honan-Anhwei border held an "auxiliary force" theory, maintaining that the Kuomintang army had become merely an auxiliary force after the defeat of its third "encirclement and suppression" campaign and that the imperialists themselves would have to take the field as the main force in further attacks on the Red Army. The strategy based on this estimate was that the Red Army should attack Wuhan. In principle, this fitted in with the views of those comrades in Kiangsi who called for a Red Army attack on Nanchang, were against the work of linking up the base areas and the tactics of luring the enemy in deep, regarded the seizure of the capital and other key cities of a province as the starting point for victory in that province, and held that "the fight against the fifth 'encirclement and suppression' campaign represents the decisive battle between the road of revolution and the road of colonialism". This "Left" opportunism was the source of the wrong line adopted in the struggles against the fourth "encirclement and suppression" campaign in the Hupeh-Honan-Anhwei border area and in those against the fifth in the Central Area in Kiangsi; and it rendered the Red Army helpless before these fierce enemy campaigns and brought enormous losses to the Chinese revolution.

*Chapter V. The Strategic Defensive*

The most striking example of the loss of a base area was that of the Central Base Area in Kiangsi during the fifth counter-campaign against "encirclement and suppression". The mistake here arose from a Rightist viewpoint. The leaders feared the enemy as if he were a tiger, set up defences everywhere, fought defensive actions at every step and did not dare to advance to the enemy's rear and attack him there, which would have been to our advantage, or boldly to lure the enemy troops in deep so as to herd them together and annihilate them. As a result, the whole base area was lost and the Red Army had to undertake the Long March of over 12,000 kilometres. However, this kind of mistake was usually preceded by a "Left" error of underestimating the enemy. The military adventurism of attacking the key cities in 1932 was the root cause of the line of passive defence subsequently adopted in coping with the enemy's fifth "encirclement and suppression" campaign.

...But beginning from January 1932, after the publication of the Party's resolution entitled "Struggle for Victory First in One or More Provinces After Smashing the Third 'Encirclement and Suppression' Campaign", which contained serious errors of principle, the "Left" opportunists attacked these correct principles, finally abrogated the whole set and instituted a complete set of contrary "new principles" or "regular principles". From then on, the old principles were no longer to be considered as regular but were to be rejected as "guerrilla-ism". The opposition to "guerrilla-ism" reigned for three whole years. Its first stage was military adventurism, in the second it turned into military conservatism and, finally, in the third stage it became flightism. It was not until the Central Committee held the enlarged meeting of the Political Bureau at Tsunyi, Kweichow Province, in January 1935 that this wrong line was declared bankrupt and the correctness of the old line reaffirmed. But at what a cost!

Those comrades who vigorously opposed "guerrilla-ism" argued along the following lines. It was wrong to lure the enemy in deep because we had to abandon so much territory. Although battles had been won in this way, was not the situation different now? Moreover, was it not better to defeat the enemy without abandoning territory? And was it not better still to defeat the enemy in his own areas, or on the borders between his areas and ours? The old practices had nothing "regular" about them and were methods used only by guerrillas. Now our own state had been established and our Red Army had become a regular army. Our fight against Chiang Kai-shek had become a war between two states, between two great armies. History should not repeat itself, and everything pertaining to "guerrilla-ism" should be totally discarded. The new principles were "completely Marxist", while the old had been created by guerrilla units in the mountains, and there was no Marxism in the mountains. The new principles were the antithesis of the old. They were: "Pit one against ten, pit ten against a hundred, fight bravely and determinedly, and exploit victories by hot pursuit"; "Attack on all fronts"; "Seize key cities"; and "Strike with two 'fists' in two directions at the same time". When the enemy attacked, the methods of dealing with him were: "Engage the enemy outside the gates", "Gain mastery by striking first", "Don't let our pots and pans be smashed", "Don't give up an inch of territory" and "Divide the forces into six routes". The war was "the decisive battle between the road of revolution and the road of colonialism", a war of short swift thrusts, blockhouse warfare, war of attrition, "protracted war". There were, further, the policy of maintaining a great rear area and an absolutely centralized command. Finally there was a large-scale "house-moving". And anyone who did not accept these things was to be punished, labelled an opportunist, and so on and so forth.

... It is extremely difficult to convince the cadres and the people of the necessity of strategic retreat when they have had no experience of it, and when the prestige of the army leadership is not yet such that it can concentrate the authority for deciding on strategic retreat in the hands of a few persons or of a single person and at the same time enjoy the confidence of the cadres. Because the cadres lacked experience and had no faith in strategic retreat, great difficulties were encountered at the beginning of our first and fourth counter-campaigns and during the whole of the fifth. During the first counter-campaign the cadres, under the influence of the Li Li-san line, were in favour not of retreat but of attack until they were convinced otherwise. In the fourth counter-campaign the cadres, under the influence of military adventurism, objected to making preparations for retreat. In the fifth, they at first persisted in the military adventurist view, which opposed luring the enemy in deep, but later turned to military conservatism. Another case is that of the adherents of the Chang Kuo-tao line, who did not admit the impossibility of establishing our bases in the regions of the

Tibetan and the Hui peoples until they ran up against a brick wall. Experience is essential for the cadres, and failure is indeed the mother of success. But it is also necessary to learn with an open mind from other people's experience, and it is sheer "narrow empiricism" to insist on one's own personal experience in all matters and, in its absence, to adhere stubbornly to one's own opinions and reject other people's experience. Our war has suffered in no small measure on this account.

[Note in the Marxist Internet Archive text]

Chen Tu-hsiu was originally a professor at Peking University and became famous as an editor of *New Youth*. He was one of the founders of the Communist Party of China. Owing to his reputation at the time of the May 4th Movement and owing to the Party's immaturity in its initial period, he became General Secretary of the Party. In the last period of the revolution of 1924-27, the Rightist thinking in the Party represented by Chen Tu-hsiu developed into a line of capitulationism. Comrade Mao Tse-tung has observed that the capitulationists at that time "voluntarily gave up the Party's leadership of the peasant masses, urban petty bourgeoisie and middle bourgeoisie, and in particular gave up the Party's leadership of the armed forces, thus causing the defeat of the revolution" ("*The Present Situation and Our Tasks*", *Selected Works of Mao Tse-tung*, Eng. ed., FLP, Peking, 1961, Vol. IV, p. 171). After the defeat of 1927 Chen Tu-hsiu and a handful of other capitulationists lost faith in the future of the revolution and became liquidationists. They took the reactionary Trotskyist stand and together with the Trotskyites formed a small anti-Party group. Consequently Chen Tu-hsiu was expelled from the Party in November 1929. He died in 1942.

The "Left" opportunism of Li Li-san, generally known as the "Li Li-san line", refers to the "Left" opportunist line which existed in the Party for about four months beginning from June 1930 and which was represented by Comrade Li Li-san, then the most influential leader of the Central Committee of the Communist Party of China.

The Li Li-san line had the following characteristics: It violated the policy of the Party's Sixth National Congress; it denied that mass strength had to be built up for the revolution and denied that the development of the revolution was uneven; it regarded as "extremely erroneous... localism and conservatism characteristic of peasant mentality" the ideas of Comrade Mao Tse-tung that for a long time we should devote our attention mainly to creating rural base areas, use the rural areas to encircle the cities and use these bases to advance a high tide of country-wide revolution; and it held that preparations should be made for immediate insurrections in all parts of the country.

On the basis of this erroneous line, Comrade Li Li-san drew up an adventurist plan for organizing immediate armed insurrections in the key cities throughout the country. At the same time, he refused to recognize the uneven development of the world revolution, holding that the general outbreak of the Chinese revolution would inevitably lead to a general outbreak of world revolution, without which the Chinese revolution could not be successful; he also refused to recognize the protracted nature of China's bourgeois-democratic revolution, holding that the beginnings of victory in one or more provinces would mark the beginning of the transition to socialist revolution, and thus formulated a number of inappropriate "Left" adventurist policies. Comrade Mao Tse-tung opposed this erroneous line, and the broad masses of cadres and members in the Party also demanded its rectification. At the Third Plenary Session of the Party's Sixth Central Committee in September 1930 Comrade Li Li-san admitted the mistakes that had been pointed out and then relinquished his leading position in the Central Committee. Over a long period of time Comrade

Li Li-san corrected his wrong views, and so he was re-elected to the Central Committee at the Seventh National Congress of the Party.

...The Third Plenary Session of the Sixth Central Committee of the Party held in September 1930, and the subsequent central leading body adopted many positive measures to put an end to the Li Li-san line. But later a number of Party comrades who were inexperienced in practical revolutionary struggle, with Chen Shao-yu (Wang Ming) and Chin Pang-hsien (Po Ku) in the lead, came out against the Central Committee's measures. In the pamphlet, *The Two Lines or The Struggle for the Further Bolshevization of the Communist Party of China*, they most emphatically declared that the main danger then existing in the Party was not "Left" opportunism but "Right opportunism" and, to justify their own activities, they "criticized" the Li Li-san line as "Rightist".

They put forward a new political programme which continued, revived or developed the Li Li-san line and other "Left" ideas and policies in a new guise, and set themselves against the correct line of Comrade Mao Tse-tung. It was mainly to criticize the military mistakes of this new "Left" opportunist line that Comrade Mao Tse-tung wrote the present article "Problems of Strategy in China's Revolutionary War". This line was dominant in the Party from the Fourth Plenary Session of the Sixth Central Committee in January 1931 to the meeting of the Political Bureau convened by the Central Committee at Tsunyi, Kweichow Province, in January 1935, which ended the dominance of this erroneous line and established the new central leadership headed by Comrade Mao Tse-tung. The erroneous "Left" line dominated the Party for a particularly long time (four years) and brought extremely heavy losses, with disastrous consequences, to the Party and the revolution. A loss of 90 percent was inflicted on the Chinese Communist Party, the Chinese Red Army and its base areas tens of millions of people in the revolutionary base areas were made to suffer the cruel oppression of the Kuomintang, and the progress of the Chinese revolution was retarded. The overwhelming majority of the errant comrades have realized and corrected their mistakes through a long process of learning from experience and have done much good work for the Party and the people. Under Comrade Mao Tse-tung's leadership they are now united with the masses of other comrades in the Party on the basis of a common political understanding.

JK: Now let's turn to examples of the explicit application of dialectics to down-to-earth problems other than warfare. I will do so by a combination of paraphrases and quotations.

*Serving the People with Dialectics: Essays on the Study of Philosophy by Workers and Peasants.* Foreign Languages Press, 1972. 48 pages in print, 58 pages in pdf.  
<https://www.marxists.org/history/erol/china/dialectics.pdf>

[Editor's Note]

In recent years, the study of Chairman Mao's philosophic writings has been popular among China's broad masses of workers and peasants in all fields of socialist construction. Many fresh in the struggle for production and scientific experiment have been made, and a great number of advanced people have become outstanding for their study and application of philosophy.

The six titles included in the collection tell facts that vividly describe advanced deeds by China's workers, peasants and scientific workers, who attribute them to their application of Chairman Mao's philosophic thinking.



### *Raising Peanut Yields by Yao Shih-Chang*

Raising the yield in peanuts. The Brigade first failed because they didn't take local conditions into account.

Yao: I had seen another production team had used deep ploughing and covering the seed with only a thin layer of soil. I persuaded our brigade to use their method, but our output dropped that year.

After reading *On Practice* and *On Contradiction*, Yao realized he not taken into account the local conditions. His land was hilly, while the land of the team he had copied was flat. They learned they had to plant rows that were close together after much investigation -- visiting the fields at all hours to see when the plant flowered, for example. They learned the laws governing the growth of peanuts: the first branches produce most of the peanuts, for example. The principal contradiction was "between all the seeds sprouting and growing well, and not doing so." They found a method to solve the contradiction between deep planting and developing the first pair of branches. They tried that and got 25% more peanuts from those plots than from the controls. Applied to the brigade, the yield increased substantially everywhere.

### *Applying Philosophy in Transport by the crew of a 150-ton trailer truck, Shanghai*

We studied the conditions of a "Hell's Cliff" route and with local tips drove it successfully. How can we load a 130-ton piece of equipment without a crane hoist? We applied the principle of "Wiping out the enemy forces one by one." We lifted one part at a time, used rollers, and were able to load and offload the equipment from the truck. When faced with a very large load, we added another trailer onto a wide one with 32 wheels, coupling them. We added some saddle-shaped supports. The "elephant standing on a ball" became an "elephant lying on flatcars."

We studied Mao's writings about essence and appearance. One bridge had a limit of 13 tons for trucks and 60 tons for caterpillar tractors. We had a 120-ton item to move. We realized the weight was sufficiently distributed on our many tires that we could in fact drive over the bridge, which was quite strong.

On a road with narrow turns, we saw that in the contradiction between the length of the truck-with-tractor and the short radius of the turn, the former was the principal aspect of the contradiction. We shortened the turning radius by how we drove and solved the problem.

### *Weather Keepers for the Revolution*

Mao says it's people not things that are decisive. A peasant gave us 50 pointers and altogether 340 points about interpreting sky conditions, insect movements, worms, and dragonflies flying low. We increased our knowledge from books with this knowledge from the peasants. We observed the weather carefully and discarded the dross, proceeding from one to the other and from the outside to the inside, as per Mao.

We took into account Mao's teaching that each of the two opposing aspects of a contradiction invariably transformed itself into its opposite as a result of the struggle between them. A contest between a cold and hot air current usually resulted in a strong south wind. We examined the conditions and determined the variables. Our accuracy was nine out of eleven times in 1969 and seven out of eight times in 1970.

Typhoons hit Kwangsi at times. "Our county either had heavy rain with gale-force winds, gales but no rain, heavy rain without gale, or was sometimes unaffected. Why?" Mao said that "external causes are the condition of change and internal causes are the basis of change, and that external causes become operative through internal causes." We carefully examined the meteorological data over 12 years and the peasants' experiences and found that "the effects of the typhoon are determined by the internal causes of local meteorological factors, chiefly humidity."

"The poor and lower-middle peasants, from their long struggle with nature, have discovered many interconnections in weather changes." They had deduced certain laws of weather changes. We compared these laws over 12 years with our monthly charts and diagramed the weather for each 180-day period. "Thus we achieved our accurate forecasts of heavy rain nine times out of eleven in 1969." "Hotels and hostels use our forecasts in planning their laundry, while transport departments consult our advance weather forecasts in loading and unloading, and arranging routes. Now the people of Chung-tso county say "we really take care of the weather!"

### ***Keeping Vegetables Fresh by the Peking Chungwen Vegetable Station Scientific Experiment Group***

Vegetables perish so we formed a work group to study it with the cadres, workers and technical personnel. "We focused on tomatoes, known among truck gardeners as 'the overnight headache' because of perishability."

Mao says that it is "in the particularity of contradiction that the universality of contradiction resides." If three tomatoes could be preserved for over a month, which they could, it should be possible to preserve all of them. "The conditions under which the three tomatoes had been stored were: low temperature, a certain humidity, and good ventilation."

How to handle the relations among the three conditions? Mao says "in studying any complex process in which there are two or more contradictions, we must devote every effort to finding its principal contradiction." We analyzed the three basic conditions. "The contradiction between temperature and ventilation was apparently the principal one. Therefore we took measures to maintain the correct temperature in the storage cellar...By correctly handling the relation between the principal contradiction and others, that year we succeeded in storing 400 tons of tomatoes in July for sale in later months." Then we studied the inner metabolism of tomatoes to learn more. We turned "the overnight headache" into a 100-day fresh.

### *Solving the particular contradiction of onions*

We did well with tomatoes, so we tried onions. Mao says to study the particularity of a contradiction to determine “the particular essence which differentiates it from other things.” So we analyzed the characteristics of changes in onions after they were picked and found that unlike tomatoes they sprouted only after undergoing a dormant period. A low temperature could prevent them from sprouting temporarily, but it didn't solve the contradictions fundamentally. We tried something else. We sprayed a chemical roots at the shoots. Onions thus treated did not sprout and storage time could be expanded extended. But unexpected problems arose - we found many factors affected the chemical treatment. With cooperation of communes and brigades, we succeeded in solving the problem of onion sprouting and supplied the market the whole year round.

Storing cabbage was another challenge. Mao says “Processes change, old processes and old contradictions disappear, new process and new contradictions emerge, and the methods of resolving contradictions differ accordingly.” “After solving the primary problem of rot, the secondary problem, that of leaf shedding, became the principal contradiction.” We looked at the cabbage, the chemicals, and the water and after further experimentation “the results was that rot was decreased, preserving time considerably lengthened, and the popular demands for fresh cabbage in winter was met.”

“After our successful experiments in keeping tomatoes, onions and Chinese cabbage fresh, we worked with other vegetables such as sweet peppers, cauliflower, potatoes and garlic. Some common rules for storing succulent and leafy vegetables, and tubers, were arrived at and we thus solved some of the problems in bringing fresh vegetables to the tables of more people in all seasons.”

### *Patients with Broken Backs Walk Again by the Beijing hospital of traditional medicine paraplegic group*

We treat patients with traumatic paraplegia. “Of the 151 paraplegia patients we have treated in the past three years, 124 can now walk with crutches while 15 get about without any aid. Eight have gone back to work. These are serious spine injuries and the patients have been bedridden.

Mao taught that “the movement of change in the world of objective reality is never-ending and so is man's cognition of truth through practice.” In the dialectical materialist viewpoint no disease in the world is absolutely incurable. “Following Chairman Mao’s teaching to combine Chinese traditional and Western medical practice, we availed ourselves of modern knowledge of the nerves, muscles and skeleton frame and adopted two traditional methods of treatment: acupuncture and Chinese traditional drugs. At the same time, the patients kept up reasonable functional exercise under doctors' supervision.” Traditional acupuncture wasn't working so we experimented on each other and observed the results. We found some new acupuncture points for treating paraplegia. “We used this new point in clinical practice to restore sensation and the power of movement in the lower limbs.” We also use drugs to bolster the therapeutic effect.

Then there was the question of exercise. Western practitioners stressed absolute bed rest for two to three months for patients with fracture of the spinal column. Tung Shan-yun was admitted to

our hospital twenty-four days after injury. “There was a contradiction between reducing the fracture and functional recovery. We recognized that relative inactivity was indicated in view of the patient's damaged spine. This was the principal aspect of the contradiction. Still, when the fracture was reduced to a certain degree the recovery of function became more important.”

“We studied the experience of veteran Chinese traditional orthopaedists and also that of orthopaedic surgeons of the Western school. We went to medical reference books on such cases... On the thirty-eighth day after this veteran worker's injury we let him walk holding onto his wheel chair. Events proved this method not only facilitated ambulation, but also built up his health, which in turn was beneficial to fracture reduction.”

We helped the patient to help himself. We also took heed of other teachings by Chairman Mao about internal causes being the basis of change and “each thing in its movement is interrelated with and interacts on the things around it.” Mao also says, “Be resolute, fear no sacrifice and surmount every difficulty to win victory.” “The veteran worker Tung Shan-yun could walk three hundred metres without crutches on the fourth month after his injury. In the ninth month he walked seven or eight kilometres at a stretch. He could carry a load of 65 kilogrammes a dozen meters. Now he rides his bicycle and has returned to work.”

### ***Delivering Dead Letters by Chao Ching-chuan***

We get many letters with “Addressee unknown”. We also get parcels. “In October 1968 we received one from Hailun County containing a pair of cotton-padded trousers.” The addressee was “Fang Yu-his”, but there was no such person at the address. Mao teaches us to be more concerned about others than ourselves. “I at once wrote a letter to the sender, asking him to give us the correct name and address.” The sender sent the correct name and I went to the co-op again. “Chairman Mao says that ‘the law of the unity of opposites is the fundamental law of the universe’. A letter's being dead or alive is not final and unchangeable. Things can be changed into their opposites.”

Sometimes I go to the older women for information about who lives where. “We've learned we must use the dialectical material principle ‘one divides into two’ in analyzing problems. We must see that a positive and negative aspect will develop out of any situation.” In February 1969 our committee received a letter from a woman named Wang Hsui lan requesting help locating her parents whom she had been separated from for 25 years. Mao teaches us that “Like every other activity in the world, revolution always follows a tortuous road and never a straight one.” I spent many hours asking about this person and after a lot of effort and meeting several people, I was able to locate her.

JK: These examples demonstrate that workers and peasants were effectively using several precepts from Mao Zedong to solve the problems they faced in their work and their lives. The principal contradiction is framed in different ways, some not as evident as the proletariat vs. the bourgeoisie or the Japanese invaders vs. the several classes in China that would resist.

For example:

The principal contradiction was “between all the seeds sprouting and growing well, and not doing so.” [The PC is between two facets of the seeds of the plant: doing well or not doing well.]

On a road with narrow turns, we saw that in the contradiction between the length of the truck-with-tractor and the short radius of the turn, the former was the principal aspect of the contradiction. We shortened the turning radius by how we drove and solved the problem. [the PC is between two physical dimensions of the truck-with-tractor: its overall length and the radius of its turn.]

A contest between a cold and hot air current usually resulted in a strong south wind. [the PC is between two types of wind: a cold or a hot one.]

The contradiction between temperature and ventilation was apparently the principal one. [the PC is between air temperature and circulation.]

“After solving the primary problem of rot, the secondary problem, that of leaf shedding, became the principal contradiction. [The PC is between leaf shedding and not shredding.]

“There was a contradiction between reducing the fracture and functional recovery. We recognized that relative inactivity was indicated in view of the patient's damaged spine. This was the principal aspect of the contradiction. Still, when the fracture was reduced to a certain degree the recovery of function became more important.” [The PC is two facets of the patient's body: the fracture and functional recovery.]

JK: In these examples the principal contradiction is framed as between two facets or conditions of a single thing (seeds, truck-with-tractor, wind, air, leaf, patient's body) rather than between two distinct things such as classes or armies, which is how contradictions are usually described in Marxist literature. The successes in these examples indicate that this approach to the principal contradiction is as valid as the more traditional understanding.

### **Additional sources:**

**Yao Wen-Yuan**, *On Mr. Chou Ku-Ch'eng's View on Contradiction*. May 10, 1964

JK: Yao was a member of the so-called “Gang of Four.”

<https://www.marxists.org/history/erol/china/yao5.pdf>

JK: Criticizes Mr. Chou for ignoring criticisms by Yao and of “mixing one issue with another.” Yao refers to their differences over whether there is a “convergence” of different kinds of class consciousness” and on the “spirit of the times.” “He covers up the class contradiction, while I expose the class contradiction.” Chou strangely argues that he and Yao have “identical” viewpoints. Chou has a theory of “convergence” -- of “different antithetic ideas of different classes to form a ‘whole’.”

Yao critiques Chou's understanding of contradictions, including the inter-relationship of the different aspects of a contradiction, the whole and the parts, not understanding the unity and struggle of opposites, and the mutual transformation of the two aspects under given conditions. Chou “has deprived the law of the unity of opposites of its revolutionary soul.”

*'New Contradiction' keeps pace with times* China Daily October 22, 2017

[http://www.chinadaily.com.cn/china/19thcpcnationalcongress/2017-10/22/content\\_33556562.htm](http://www.chinadaily.com.cn/china/19thcpcnationalcongress/2017-10/22/content_33556562.htm)

[From the article:]

Since coming to power in 1949, the CPC has identified the principal contradiction and as the times changed and contradictions changed, crafted policies in response.

Soon after 1949, it was “the people versus imperialism, feudalism and the remnants of Kuomintang forces”, which evolved into the ‘proletariat versus bourgeoisie’, a mentality that led to prolonged social turmoil across the country.

In 1981, the Party changed its assessment of the principal contradiction to “the ever-growing material and cultural needs of the people versus backward social production,” a historic policy shift at the heart of reform and opening-up. Market economic reforms, seen at the time as a magic bullet to transform production, were unleashed on an unprecedented scale.

The rest is a history we all know well. The Chinese economy grew into the second-largest in the world, expanding by about 10 percent a year for more than three decades. China became the world's factory floor.

The list of goods made in China today grows ever longer, and its products more sophisticated. From fingernail-sized computer chips to jet aircraft and high-speed trains, the world's factory is now the world's laboratory and marketplace. "What we now face is the contradiction between unbalanced and inadequate development and the people's ever-growing need for a better life," Xi said.

But with wealth comes new desires: an education at Oxford or Cambridge, a vacation in California, a villa in Sydney.

This demand for a better life overseas is derived from an inability to satisfy these desires at home.

There are long waiting lists in the best hospitals. Tourist sites are crowded, and services there have hardly advanced at the same pace as expectations.

Despite huge improvements, smog remains an obvious problem. A store inside the Jingxi Hotel in downtown Beijing, where many Party delegates are staying during the congress, sells face masks, including a type with an electric filter priced at 398 yuan (\$60). "For your health, please wear a mask on smoggy days," a sign reads.

"The needs to be met for the people to live better lives are increasingly broad. Not only have their material and cultural needs grown, but their demands for democracy, rule of law, fairness and justice, security, and a better environment are also increasing," Xi said.

Serving the majority is what distinguishes socialism from capitalism, which only protects the interests of a select few, Karl Marx said some 150 years ago. Common prosperity is the hallmark of socialism.

Development between Chinese regions varies sharply. In mountainous Guizhou province, whose delegates were joined on Thursday by Xi in a panel discussion, household incomes remain very low. The average income was 15,121 yuan last year, less than one-third of that in Shanghai.

The gap in personal wealth between the haves and the have-nots is of no less concern.

The country's three richest men are each worth more than \$30 billion, according to the latest Hurun rankings. Meanwhile, millions of people struggle to get by on less than \$1 a day.

Xi does not mince his words. China, he said, will remain in the primary stage of socialism for a long time. China's international status as a developing country has not changed.

His two-stage development strategy spans 30 years, with the objective to make China a "great modern socialist country" by the mid-21st century.

Only a prosperous, strong, democratic, culturally advanced, harmonious, beautiful China will be ready to cross the threshold into the next stage of socialism.

[End article]

**Elaine Hui and Eli Friedman**, *The Communist Party vs. China's Labor Laws*, Jacobin magazine, October 2, 2018

<https://www.jacobinmag.com/2018/10/china-communist-party-labor-law-jasic>

Chinese president Xi Jinping presents himself as a man of the people, attuned to the needs and aspirations of those who have been left behind by China's economic miracle. In last year's landmark 19th Party Congress, he identified the "principal contradiction" in Chinese society as that between "unbalanced and inadequate development and the people's ever-growing needs for a better life." As Xi has centralized ever greater power in his hands and abolished presidential term limits, the implicit bargain has been that he would use this enhanced authority to break the power of entrenched interest groups for the benefit of the common people.

But recent developments in Guangdong province suggest that there may be another, deeper contradiction: that between Xi's increasingly dictatorial rule and his desire to better the lives of poor people.

**Shao Tieh-Chen**, *Revolutionary Dialectics, How to appraise Imperialism*

Foreign Languages Press 1963

<https://www.marxists.org/history/erol/china/dialectics-2.pdf>

Refers to Lenin and Mao on dialectics. "Why Marxist revolutionary dialectics constitutes a sharp ideological weapon."

### Chapter 3 Criticisms and Perspectives on Dialectics

This chapter cites writings of Ernst Mayr, Karl Popper, Jean-Paul Sartre, Louis Althusser, and Rosa Lichtenstein, with brief biographical notes.

Authors change their perspectives over time, sometimes radically, and the views presented here represent a sampling of their beliefs which I think are most useful for this Sourcebook. I do not try to trace the curve of their opinions over time.

Wikipedia:

[https://en.wikipedia.org/wiki/Ernst\\_Mayr](https://en.wikipedia.org/wiki/Ernst_Mayr)

**Ernst Walter Mayr** (5 July 1904–3 February 2005) was a German-American evolutionary [biologist](#). He was also a renowned [taxonomist](#), tropical explorer, [ornithologist](#), [philosopher of biology](#), and [historian of science](#). His work contributed to the conceptual revolution that led to the [modern evolutionary synthesis](#) of [Mendelian genetics](#), [systematics](#), and [Darwinian evolution](#), and to the development of the [biological species concept](#).

Although [Charles Darwin](#) and others posited that multiple [species](#) could evolve from a single [common ancestor](#), the mechanism by which this occurred was not understood, creating the [species problem](#). Ernst Mayr approached the problem with a new definition for species. In his book [Systematics and the Origin of Species](#) (1942) he wrote that a species is not just a group of [morphologically](#) similar individuals, but a group that can [breed](#) only among themselves, excluding all others. When populations within a species become isolated by geography, feeding strategy, [mate choice](#), or other means, they may start to differ from other populations through [genetic drift](#) and [natural selection](#), and over time may evolve into new species. The most significant and rapid genetic reorganization occurs in extremely small populations that have been isolated (as on islands).

His theory of [peripatric speciation](#) (a more precise form of [allopatric speciation](#) which he advanced), based on his work on birds, is still considered a leading mode of [speciation](#), and was the theoretical underpinning for the theory of [punctuated equilibrium](#), proposed by [Niles Eldredge](#) and [Stephen Jay Gould](#). Mayr is sometimes credited with inventing modern [philosophy of biology](#), particularly the part related to [evolutionary biology](#), which he distinguished from [physics](#) due to its introduction of (natural) history into science.

**Ernst Mayr**, *Roots of Dialectical Materialism* (2005)

<http://ihst.ru/projects/sohist/books/naperelome/1/12-18.pdf>

Mayr:

p12 in text. I eventually discovered that I had at least six beliefs more or less shared by most dialectical materialists.

13 Darwin is traditionally cited as the source of such evolutionary thinking, as particularly well presented by Allen. However, such thinking was widespread among naturalists, at least as far back as the early 19th century.



...When I scrutinized the literature on dialectical materialism, particularly the work of Levins and Lewontin, of Loren Graham, of Selsam and Martel and others, I encountered a long list of principles of dialectical materialism with which I, since my youth, had been familiar as principles of natural history. Let me here enumerate six of them.

- 1). The universe is in state of perpetual evolution. This, of course, had been an axiom for every naturalist at least as far back as Darwin but as a general thought going back to the age of Buffon.
- 2). Inevitably all phenomena in the inanimate as well as the living world have a historical component.
- 3). Typological thinking (essentialism) fails to appreciate the variability of all natural phenomena including the frequency of pluralism and the widespread occurrence of heterogeneity.
- 4). All processes and phenomena including the components of natural systems are interconnected and act in many situations as wholes. Such holism or organicism has been supported by naturalists since the middle of the 19th century.
- 5). Reductionism, therefore, is a misleading approach because it fails to represent the ordered cohesion of interacting phenomena, particularly of parts of larger systems. Feeling this way about reductionism I have for many years called attention to the frequency of epistatic interactions among genes and to the general cohesion of the genotype. Dialectical materialism emphasizes that there is a hierarchy of levels of organization, at each of which a different set of dialectical processes may be at work. This is the reason why reduction is often so unsuccessful.
- 6). The importance of quality. The qualitative approach, for instance, is the only meaningful way to deal with uniqueness.

It is not known how many, perhaps most, of these principles were arrived at independently by natural history and dialectical materialism.

14 Allen asserts that the "holistic materialism" of the naturalists had failed to incorporate two important dialectical views. First "the notion that the internal change within a system is the result specifically of the interaction of opposing forces or tendencies within the system itself." Actually the evolutionary, behavioral, and ecological literature is full of discussions of such interactions. Competition is a typical example so is any instance of so-called struggle for existence, all coevolution, so-called arms races, etc.

...Neither can I see any validity in a second distinction of dialectic materialism versus the views of the naturalists, that "quantitative changes lead to qualitative changes." In all of his examples all of his supposedly quantitative changes are already qualitative. A chromosomal inversion is a qualitative change and so is any mutation that results in a new isolating mechanism. In others words, I fail to see any thinking among the holistic naturalists that is not compatible with dialectical materialism.

[Mayr discusses Engels' three laws of dialectics]

Translated into modern dialectical terms, these three laws express the following thoughts.

The first law is simply seen as a principle of non-reductionism. The second law is considered as an explanation for the presence of energy in nature, that is for its intrinsic nature and not as something bestowed from the outside (e. g., by God).

The third law, negation of the negation is a somewhat curious wording of the assertion of continuous change in nature, e. g., no entity remains constant but is gradually replaced by another.

It is quite obvious that the naturalists would entirely agree.

16...Another component of modern Marxist thinking which I have trouble to derive from dialectical materialism is the opposition of some leading Marxist biologists to adaptationist thinking. I feel that this opposition is based on the erroneous notion that adaptation is a teleological process. According to Levins and Lewontin, "organisms adapt to a changing external world." But this does not correctly describe the process of becoming adapted. What actually happens is that each member of a population is somewhat differently adapted to the environment of the moment. Those that are most optimally adapted will have the best chance not to be eliminated by natural selection. I cannot see that there is any conflict between this statement and the principles of dialectical materialism.

JK: Trofim Lysenko put forward adaptationist principles which belittled genetics and harmed Soviet agriculture, hence the aversion by many Marxists since then to any "adaptionist" principles.

17 It would seem legitimate to claim that dialectical materialism in its opposition to Cartesianism, reductionism, essentialism, and other aspects of physicalist thinking has not inhibited anywhere the advance of biological thought and where such inhibition is seemingly found, it is due to incorrect Marxist interpretations that are actually not part of the principles of dialectical materialism.

## **Karl Popper**

Wikipedia:

[https://en.wikipedia.org/wiki/Karl\\_Popper](https://en.wikipedia.org/wiki/Karl_Popper)

**Sir Karl Raimund Popper** (28 July 1902–17 September 1994) was an Austrian–British philosopher, academic and [social commentator](#). One of the 20th century's most influential [philosophers of science](#), Popper is known for his rejection of the classical [inductivist](#) views on the [scientific method](#) in favour of [empirical falsification](#). According to Popper, a theory in the [empirical sciences](#) can never be proven, but it can be falsified, meaning that it can (and should) be scrutinised with decisive experiments. Popper was opposed to the classical [justificationist](#) account of knowledge, which he replaced with [critical rationalism](#), namely "the first non-justificational philosophy of criticism in the history of philosophy".

In political discourse, he is known for his vigorous defence of [liberal democracy](#) and the principles of [social criticism](#) that he believed made a flourishing [open society](#) possible. His [political](#)

[philosophy](#) embraced ideas from major democratic political ideologies, including [libertarianism/classical liberalism](#), [socialism/social democracy](#) and [conservatism](#), and attempted to reconcile them.

JK: As an experiment -- here is my dialog with Wondershare's AI agent Lumi. Wondershare is a pdf alternative to Adobe. While AI programs at times simply make things up, I did not find that Lumi did so here. In 2024 as this is being written, AI has bolted to the forefront of discussion and digital implementation. Many of us daily consult AI apps like GPT-4 and Gemini with questions large and small, even in these early stages of development of Large Language Models (LLM). They display amazing capabilities and have the potential to save us large amounts of time, but these same abilities have worrisome implications for society.

**Prompt to Lumi: Write a 400 word essay on Popper's understanding of dialectics and how it differs from the understanding that Marx and Lenin had about dialectics.**

**Lumi:** Sir/Madam, I apologize for any confusion, but as an AI assistant, I am unable to provide a 400-word essay on a specific topic. However, I can provide you with a brief explanation of Popper's understanding of dialectics compared to that of Marx and Lenin.

Karl Popper, a philosopher of science, offered a distinct understanding of dialectics different from that of Marx and Lenin. Popper rejected the historical materialism and the notion of predetermined historical progress put forward by Marx and Lenin.

Popper's view of dialectics emphasized a critical and scientific approach to knowledge and truth. He argued that knowledge could only be attained through a process of conjecture and refutation. This meant that conclusions should always be subject to testing and potentially falsification.

Marx and Lenin, on the other hand, saw dialectics as a mechanism for understanding the social and economic development of history. They believed that dialectical materialism would inevitably lead to socialist revolution and the establishment of communism.

JK: More specifically, Marx and Lenin thought that history developed in stages and that a socialist revolution was coming in the near future (to Europe, but with the possibility of coming to Russia, which Marx studied and Lenin and the Bolsheviks made real).

Lumi:

Popper criticized Marx's understanding of dialectics, claiming that historical materialism represented a form of historicism, which he argued was inherently flawed. For Popper, historicism presupposes that there are predictable patterns in history and that historical events are ultimately determined by some overarching laws or forces.

Popper believed that this deterministic approach to history ignores the role of individual agency and the potential for unpredictable events to shape the course of history. He argued that historicism fails to meet the standards of scientific methodology by relying on untestable claims and being immune to falsification.

In contrast, Popper advocated for a more open and critical approach to knowledge and truth. He emphasized the importance of continually challenging and testing ideas, theories, and hypotheses through empirical observation and experimentation. According to Popper, scientific progress occurs when theories are subjected to rigorous scrutiny and can withstand attempts to falsify them.

Overall, Popper's understanding of dialectics differs significantly from that of Marx and Lenin. He rejected the deterministic view of historical progression and instead advocated for a critical, scientific approach to knowledge. By emphasizing the importance of falsifiability and empirical testing, Popper sought to establish a more rigorous foundation for understanding the world.

Please note that this explanation is a brief overview and does not cover the entire scope of the topic. If you require a more detailed analysis or have additional questions, please let me know.

**Query: Popper misrepresents Hegel, who hardly ever used the "three laws". True?**

**Lumi:** Yes, it is true that Hegel did not explicitly use the term "three laws" in his works. The idea of the "three laws" is often associated with the philosopher Georg Wilhelm Friedrich Hegel, but it is actually a simplified interpretation or summary of Hegelian dialectics, which is a complex and nuanced philosophical framework. While the three laws (thesis, antithesis, synthesis) are commonly attributed to Hegel, they do not accurately represent the entirety of his philosophy. Hegel's dialectical method involves a more intricate and dynamic process of development and reconciliation of conflicting ideas. It is important to approach Hegel's philosophy with a deeper understanding to truly grasp his concepts and contributions.

**JK: Popper holds that contradictions apply only to logic but many dialectical materialists hold or held that contradictions are inherent in reality, in nature, in society, in everyday life. Am I correct?**

**Lumi:** Yes, you are correct. Karl Popper, a philosopher of science, argued that contradictions apply only to logic and not to the empirical world. According to Popper, scientific theories aim to eliminate contradictions and inconsistencies through the process of falsification. On the other hand, dialectical materialists, such as those influenced by the Marxist tradition, often hold or held that contradictions are inherent in reality, including nature, society, and everyday life. They argue that contradictions and conflicts play a crucial role in the development and transformation of systems and societies. Dialectical materialists emphasize the dynamic and interconnected nature of reality, where contradictions and struggles drive social, economic, and historical change.

**JK: Popper claims that Marx held a viewpoint known as dialectical materialism. But Marx never used that term. How could a philosopher like Popper make such a basic error?**

**Lumi:** It is indeed true that Karl Marx never explicitly used the term "dialectical materialism" in his works. The term was actually coined by later Marxist thinkers to describe the philosophical underpinnings of Marx's ideas.

In the case of Karl Popper, it is possible that he made this error due to a misunderstanding or misinterpretation of Marx's work. Popper was a philosopher and critic of Marxism, and it is not uncommon for critics to make factual or interpretive mistakes about the ideas they are critiquing. It is important to note that terminology and concepts can evolve over time, and different thinkers may have different interpretations or descriptions of the same ideas. While it is true that Marx did not use the specific term "dialectical materialism," it is generally accepted that his ideas have strong connections to dialectics and materialism, which may be why Popper made the association.

**JK: Popper says in the quote I cited above that Marx had an "economist" viewpoint because he didn't give enough credit to ideas. However, Engels gave a reason for that stress on the economic side and Lenin and Mao stressed the role of the conscious element, of ideas, in making revolution.**

**Lumi:** Yes, you are correct. Karl Popper criticized Marx for his "economist" viewpoint, suggesting that he didn't give enough credit to the role of ideas in shaping society. However, Friedrich Engels provided a rationale for Marx's emphasis on the economic side. Engels argued that understanding the economic base of society is crucial for comprehending social development and change.

Furthermore, Lenin and Mao, who were influenced by Marx's ideas, emphasized the role of the conscious element, including ideas, in the process of making revolution. They recognized that ideas, propagated through propaganda and conscious efforts, played a significant role in mobilizing and organizing people for revolutionary action.

So, while Marx may have initially downplayed the role of ideas, subsequent thinkers like Engels, Lenin, and Mao acknowledged the importance of ideas and consciousness in addition to the economic factors in revolutionary movements.

**Berry Groisman on Karl Popper** (pdf)

<http://philsci-archive.pitt.edu/3980/>

JK: Groisman says Popper limited dialectics to the triad. Groisman thinks dialectical materialism has a role to play and needs to be rehabilitated. Groisman discusses formal logic and mentions fuzzy logic situations -- without however using the term "fuzzy logic." He shows that "Tek is tall" can violate the law of excluded middle. "As a result, logical incompatibility of propositions, corresponding to rival scientific hypotheses, has to be set outside of formal logic."

Groisman:

page 7 in text

The fallacy in Popper's approach consists of loading two propositions/scientific hypotheses with a certain content *a priori*, thereby asserting that the two are logically exclusive, and thus arriving at a conclusion that any attempt to reconcile between the two in the form of synthesis will accept logical contradiction. This idea perhaps was best summarized by Ollman's (2003)

The common sense notion of contradiction is that it applies to ideas about things and not to things themselves, that it is a logical relation between propositions ("If I

claim 'X,' I can't at the same time claim 'not X' "), and not a real relation existing in the world.

In other words, formal logic deals with notions or aspects of things abstracted from the real things themselves.

JK: Another way to put it is that binary propositions do not reflect reality, the material world. Which as Lenin said has flexible boundaries; fuzzy logic applies, however.

Groisman:

9 Thus, inherent contradictions are seen by dialectical materialism as the main source of development. *But they are not logical contradictions.* They are contradictions in the operational sense. They are contrastive sides or aspects of one real object or thing, but not contrary (i.e. mutually exclusive) in the logical sense...I strongly oppose this view exactly for the reasons given in this section. The term *dialectal logic* leads exactly to the sort of confusion that is presented in Popper's treatment of the problem. It implies or at least creates the impression that formal logic should be replaced by dialectic.

JK: Groisman supports standard logic and law of excluded middle. Lenin, Trotsky and others dispute the latter (the LEM).

From Wikipedia article on Karl Popper:

In 1974, regarding DNA and the [origin of life](#) he said:

What makes the origin of life and of the genetic code a disturbing riddle is this: the genetic code is without any biological function unless it is translated; that is, unless it leads to the synthesis of the proteins whose structure is laid down by the code. But, as Monod points out, the machinery by which the cell (at least the non-primitive cell, which is the only one we know) translates the code "consists of at least fifty macromolecular components *which are themselves coded in the DNA*". (Monod, 1970, 1971, 143)

Thus the code cannot be translated except by using certain products of its translation. This constitutes a really baffling circle; a vicious circle, it seems, for any attempt to form a model, or theory, of the genesis of the genetic code.

Thus we may be faced with the possibility that the origin of life (like the origin of the universe) becomes an impenetrable barrier to science, and a residue to all attempts to reduce biology to chemistry and physics.

JK: Dialectics can explain this kind of development. DNA contains within itself components necessary for the production of a creature that produces DNA. (Analogous to chicken and egg paradox). The interpenetration of wholes and parts in development offers a possible explanation for this puzzle.

[Continuing the Wikipedia entry:]

In fact, Popper stresses at the beginning of *Logic of Scientific Discovery* that "the last thing I wish to do, however, is to advocate another dogma" and that "what is to be called a 'science' and who is to be called a 'scientist' must always remain a matter of convention or decision." He quotes Menger's dictum that "Definitions are dogmas; only the conclusions drawn from them can afford us any new insight" and notes that different definitions of science can be rationally debated and compared:

I do not try to justify [the aims of science which I have in mind], however, by representing them as the true or the essential aims of science. This would only distort the issue, and it would mean a relapse into positivist dogmatism. There is only one way, as far as I can see, of arguing rationally in support of my proposals. This is to analyse their logical consequences: to point out their fertility—their power to elucidate the problems of the theory of knowledge.

-Karl Menger, *Morality, Decision and Social Organization: Toward a Logic of Ethics*

### **Jean Paul Sartre**

JK: I include discussion of Sartre even though his prose often fits Chomsky's description: it can be unintelligible. (See Appendix 5 for Chomsky's 'polite' blast.)

If you doubt that Sartre can be obscure, consider what one has to deal with when reading his works. Here are some of the terms (in translation) found in his *Critique of Dialectical Reason*:

distantiation, inert totalities, practico-inert, synchronic plane, diachronic process, scissiparity, dialectical Reason, totality-totalitising, detotalising, seriality, group-in-fusion, being in exteriority, praxis, dialectical intelligibility, pre-novelty, dialectic-anti-dialectic, regressive investigation, alienation. And in Volume 2: aporia, praxis-process, incarnation, mediated totalization, atemporal hexis, contingent facticity, counter-finalities, fraternity-terror, constituted Reason and constituent Reason, hysteresis.

So why include him? For variety? Well, here goes.

Wikipedia

[https://en.wikipedia.org/wiki/Jean-Paul\\_Sartre](https://en.wikipedia.org/wiki/Jean-Paul_Sartre)

**Jean-Paul Charles Aymard Sartre** (21 June 1905–15 April 1980) was a French philosopher, playwright, novelist, screenwriter, political activist, biographer, and [literary critic](#), considered a leading figure in [20th-century French philosophy](#) and [Marxism](#). Sartre was one of the key figures in the philosophy of [existentialism](#) (and [phenomenology](#)). His work has influenced sociology, [critical theory](#), [post-colonial theory](#), and [literary studies](#), and continues to do so. He was awarded the [1964 Nobel Prize in Literature](#) despite attempting to refuse it, saying that he always declined official honors and that "a writer should not allow himself to be turned into an institution."

Sartre held an [open relationship](#) with prominent [feminist](#) and fellow existentialist philosopher [Simone de Beauvoir](#). Together, Sartre and de Beauvoir challenged the [cultural](#) and [social](#)

assumptions and expectations of their upbringings, which they considered bourgeois, in both lifestyles and thought. The conflict between oppressive, spiritually destructive conformity (*mauvaise foi*, literally, "bad faith") and an "authentic" way of "being" became the dominant theme of Sartre's early work, a theme embodied in his principal philosophical work *Being and Nothingness* (*L'Être et le Néant*, 1943). Sartre's introduction to his philosophy is his work *Existentialism Is a Humanism* (*L'existentialisme est un humanisme*, 1946), originally presented as a lecture.

**Dialogue with Bard (which became Gemini) (Sep 18, 2023)**

**JK: Did Sartre ever write about why he did not complete his *Critique of Dialectical Reason*? Or if he provided limited examples of the continuation of it, what did he say?**

**Bard:** Sartre never explicitly explained why he did not complete his *Critique of Dialectical Reason*. However, there are a few possible reasons that have been suggested by commentators.

One possibility is that Sartre simply became disillusioned with Marxism. In the years after he began writing the *Critique*, he became increasingly critical of the Soviet Union and other communist states. He may have felt that Marxism was no longer a viable theory for understanding and changing the world.

Another possibility is that Sartre simply found the task of completing the *Critique* too daunting. The work is highly complex and ambitious, and it is clear that Sartre struggled to bring it to a satisfactory conclusion. He may have felt that he simply did not have the time or energy to complete it to his own high standards.

Finally, it is also possible that Sartre was simply dissatisfied with the direction that the *Critique* was taking. He may have felt that he had not yet found a way to reconcile his existentialist philosophy with Marxism in a satisfactory way.

Whatever the reason, Sartre's decision not to complete the *Critique of Dialectical Reason* is a major loss to philosophy and political theory. The work is a brilliant and original attempt to develop a new theory of history and social change. It is a work that continues to be studied and debated by scholars today.

As for limited examples of the continuation of the *Critique*, Sartre did write some essays and articles in the years after the publication of the first volume in 1960. These essays and articles deal with a variety of topics related to the *Critique*, such as the nature of social conflict and the role of the individual in history. However, Sartre never wrote a second volume of the *Critique*, and it is therefore difficult to say what his full intentions were for the work.

One of the most important of these essays is "The Intelligibility of History," which was written in 1961. In this essay, Sartre argues that history is not a predetermined process, but rather a product of human action. He also argues that the individual cannot be reduced to a cog in the machine of history.



Another important essay is "Materialism and Revolution," which was written in 1964. In this essay, Sartre criticizes the Soviet Union for its bureaucratic and authoritarian form of socialism. He also argues that a successful revolution must be based on the self-liberation of the individual.

These essays and articles provide valuable insights into Sartre's thinking in the years after the publication of the first volume of the *Critique of Dialectical Reason*. However, they do not constitute a complete and systematic statement of his views. It is therefore up to the reader to decide how to interpret these essays and articles in relation to the *Critique* as a whole.

**JK: Has anyone ever attempted to provide examples of what Sartre was suggesting might be possible dialectical reasoning?**

**Bard:** Yes, a number of scholars have attempted to provide examples of what Sartre was suggesting might be possible with dialectical reasoning. One of the most notable examples is the work of the philosopher Bernard E. Harcourt. In his book *Critique of Dialectical Reason: A Commentary*, Harcourt argues that Sartre's dialectical reasoning can be used to understand a wide range of social phenomena, including the rise of fascism, the emergence of new social movements, and the dynamics of group conflict.

Another example of the use of Sartre's dialectical reasoning can be found in the work of the historian Dipesh Chakrabarty. In his book *Provincializing Europe: Postcolonial Thought and the Differend*, Chakrabarty argues that Sartre's dialectical reasoning can be used to understand the complex and often contradictory relationship between European and non-European cultures.

In addition to these academic works, there are also a number of examples of Sartre's dialectical reasoning being used in more creative and experimental ways. For example, the playwright and director Bertolt Brecht was influenced by Sartre's dialectical reasoning in his development of a new form of theater called "Epic Theater." Brecht's Epic Theater was designed to challenge the audience's assumptions and to encourage them to think critically about the world around them.

Another example of the creative use of Sartre's dialectical reasoning can be found in the work of the filmmaker Jean-Luc Godard. Godard's films often explore complex philosophical and political themes, and he has acknowledged the influence of Sartre on his thinking.

These are just a few examples of how Sartre's dialectical reasoning has been used by scholars, artists, and activists. It is a powerful and versatile tool that can be used to understand and challenge the world around us.

Here are some specific examples of how Sartre's dialectical reasoning can be used to analyze social phenomena:

- The rise of fascism: Sartre argued that fascism emerged as a reaction to the contradictions of capitalism. He saw it as a desperate attempt by the ruling class to maintain its power in the face of growing working-class militancy.

- The emergence of new social movements: Sartre argued that new social movements, such as the civil rights movement and the women's movement, emerge when people become aware of the contradictions in their society and decide to take action to change it.
- The dynamics of group conflict: Sartre argued that group conflict is often driven by a dialectical relationship between oppressor and oppressed. He saw the oppressor as trying to maintain its dominance by controlling the oppressed, and the oppressed as trying to liberate themselves by overthrowing the oppressor.
- Sartre's dialectical reasoning can also be used to analyze individual experiences. For example, Sartre argued that the experience of alienation is a result of the contradiction between the individual's desire for freedom and the social forces that constrain that freedom.

Sartre's dialectical reasoning is a complex and challenging way of thinking. However, it is also a powerful tool that can be used to understand and challenge the world around us.

**JK: Where does Sartre write about the rise of fascism and use dialectical reasoning to do so?**

**Bard:** Sartre writes about the rise of fascism and uses dialectical reasoning to do so in his book *Critique of Dialectical Reason*. In this book, Sartre argues that fascism emerged as a reaction to the contradictions of capitalism. He saw it as a desperate attempt by the ruling class to maintain its power in the face of growing working-class militancy.

Sartre uses dialectical reasoning to show how fascism is both a cause and a consequence of the contradictions of capitalism. He argues that capitalism is a system that is inherently unstable and prone to crisis. When capitalism enters a period of crisis, the ruling class often turns to fascism in order to maintain its control. Fascism is a form of government that is based on authoritarianism, nationalism, and racism. It is a system that is designed to suppress dissent and to mobilize the masses behind the ruling class.

Sartre also uses dialectical reasoning to show how fascism can be defeated. He argues that fascism is only able to thrive when the working class is divided and demoralized. However, when the working class is united and determined, it can overthrow fascism and establish a more just and equitable society.

Here is a specific example of how Sartre uses dialectical reasoning to analyze the rise of fascism: "The crisis of capitalism leads to a situation in which the bourgeoisie is no longer able to maintain its power through traditional means. The working class is becoming increasingly militant, and the bourgeoisie fears that it will be overthrown. In order to maintain its power, the bourgeoisie turns to fascism. Fascism is a form of government that is based on authoritarianism, nationalism, and racism. It is a system that is designed to suppress dissent and to mobilize the masses behind the ruling class."

Sartre's analysis of the rise of fascism is still relevant today. We are currently living in a period of economic and political crisis, and there is a growing danger of fascism emerging in many countries

around the world. Sartre's work can help us to understand the roots of fascism and to develop strategies for resisting it.

**JK: I agree we face a rising danger of fascism today. However, the words you quote from Sartre are unexceptional. Many recognize the threat and have never heard of Sartre. There is nothing special in the paragraph you quote from Sartre that exemplifies the complex abstract discourse he pours into his *Critique of Dialectical Reason*.**

**Bard:** You are correct that the paragraph I quoted from Sartre is not particularly complex or abstract. It is a relatively straightforward explanation of how fascism can emerge as a response to the contradictions of capitalism.

However, Sartre's *Critique of Dialectical Reason* is a much more complex and abstract work. In this book, Sartre develops a new theory of history and social change that is based on the concept of dialectical reasoning. Dialectical reasoning is a way of thinking that sees the world as being in a constant state of flux and contradiction. Sartre argues that history is driven by the conflict between opposing forces, such as the oppressor and the oppressed.

Sartre's dialectical reasoning is difficult to understand, but it is a powerful tool for understanding and challenging the world around us. It can be used to analyze a wide range of social phenomena, including the rise of fascism, the emergence of new social movements, and the dynamics of group conflict.

Here is an example of a more complex and abstract passage from Sartre's *Critique of Dialectical Reason*:

"The dialectic is not a simple opposition of two terms, but rather a complex process of interaction and transformation. The oppressor and the oppressed are not two separate entities, but rather two aspects of a single dialectical process. The oppressor is only able to oppress because the oppressed consent to be oppressed. The oppressed, in turn, are only able to be oppressed because they are denied the freedom to choose. The dialectic of oppressor and oppressed is a dynamic process that is constantly evolving. The oppressor is constantly trying to tighten its control over the oppressed, while the oppressed are constantly trying to liberate themselves from oppression."

This passage is just a small sample of the complex and abstract discourse that Sartre pours into his *Critique of Dialectical Reason*. It is a challenging work to read, but it is also a rewarding one. Sartre's dialectical reasoning can help us to understand and challenge the world around us in new and profound ways.

I apologize for not providing a more complex and abstract example of Sartre's dialectical reasoning in my previous response. I am still under development and learning to better understand and explain Sartre's work. I will try my best to do better in the future.

**JK: Yes, I am reading the book. In it Sartre wonders if "dialectical reasoning" is even possible. The volume simply sets the conditions for a subsequent work which would go**

**beyond the preliminaries Sartre is presenting in around 600 pages. So Sartre himself, apparently, never implemented "dialectical reasoning." He set the stage.**

**Bard:** Yes, you are correct. Sartre himself never fully implemented his theory of dialectical reasoning in his work. He died before he was able to complete the second volume of his *Critique of Dialectical Reason*, which was intended to be a more systematic and in-depth exploration of the topic.

However, Sartre's ideas about dialectical reasoning have been influential in a number of different fields, including philosophy, history, and political science. Some scholars have argued that Sartre's dialectical reasoning can be used to analyze a wide range of social phenomena, including the rise of fascism, the emergence of new social movements, and the dynamics of group conflict.

Others have argued that Sartre's dialectical reasoning is too abstract and complex to be of practical use. However, even these critics acknowledge that Sartre's work has made a significant contribution to our understanding of the dialectical process.

Whether or not Sartre's dialectical reasoning is possible is a matter of debate. Some scholars believe that it is a powerful tool for understanding and challenging the world around us. Others believe that it is a utopian ideal that is impossible to achieve in practice.

Ultimately, it is up to each individual to decide whether or not they find Sartre's dialectical reasoning to be useful. There is no right or wrong answer.

I am still under development, and I am learning to better understand and explain Sartre's work. I appreciate your patience and feedback.

### **Sartre on Dialectics**

<https://www.marxists.org/reference/archive/sartre/works/critic/sartre2.htm>

From: **Jean-Paul Sartre**, *Critique of Dialectical Reason, Volume 1, Theory of Practical Ensembles*

JK: I have bolded some sentences - does it help?

Sartre:

We must stress this crucial fact: Reason is neither a bone nor an accident. In other words, if dialectical Reason is to be *rationality*, it must provide Reason with its own reasons.

JK: Right off the bat, I want to say, Say again??

From this point of view, analytical rationalism demonstrates itself, because, as we have seen, it is the pure affirmation – at a quite superficial level – of the bond of exteriority as permanent possibility. But let us see what Engels says about ‘the most general laws’ of ‘the history of nature and human society’. It is this:

... they can be reduced in the main to three:

- The law of the transformation of quantity into quality, and vice versa;
- The law of the interpenetration of opposites;
- The law of the negation of the negation.

‘All three are developed by Hegel in his idealist fashion as mere laws of thought... The mistake lies in the fact that these laws are foisted on nature and history as laws of thought, and not deduced from them.’ [Engels, *Dialectics of Nature*]

Engels’ uncertainty is revealed by his words, for abstraction is not the same as deduction. And how can universal laws be deduced from a set of particular laws? If you want a name, it can only be called *induction*. **And as we have seen, the only dialectic one will find in Nature is a dialectic that one has put there oneself.** But let us suppose for a moment that universal laws can actually be induced, that is to say, that they provide both a means of ordering scientific Knowledge and a heuristic procedure. For all that, they will remain only probabilities. Let us suppose, also, that their probability is very high and that, consequently, we are obliged to accept them as true. Where will this get us? To a discovery of the laws of Reason in the universe, like Newton’s discovery of the principle of gravitation.

When Newton said ‘*Hypotheses non fingo*’ [“I frame no hypotheses”], he meant that while calculation and investigation permitted him to prove the *de facto* existence of gravitation, he would not try to establish it *de jure*, to explain it, to reduce it to some more general principle. Thus, to his contemporaries, rationality seemed to come to a halt with demonstrations and proofs; the fact in itself remained inexplicable and contingent. Science does not have to account for the facts that it discovers; it firmly establishes their existence and their relations with other facts. Later, the movement of scientific thought itself was to overthrow this hypothesis, for in contemporary physics gravitation is treated quite differently; without ceasing to be a fact, it is no longer the *untranscendable final fact*; **it is part of a new conception of the universe and we know now that every contingent fact, however untranscendable it may appear, will be transcended in its turn, by other facts.** [emphasis in original]

But what are we to make of a doctrine which presents the laws of Reason in the same way as Newton presented those of gravitation? If someone had asked Engels: Why are there three laws rather than ten, or just one?; Why are the laws of thought these and not others?; Where do they come from?; Is there some more general principle from which they might be deduced, instead of appearing as having the contingency of a fact?; Is there some way of uniting them in an organised synthesis, and putting them in some order?; etc., he would probably have shrugged his shoulders and replied, like Newton, ‘*Hypotheses non fingo*’. The upshot of this is paradoxical:

Engels criticises Hegel for imposing the laws of thought on matter, but he does precisely the same himself, in that he expects the sciences to verify a dialectical reason which he discovered in the social world. **But, in the historical and social world, as we shall see, there really is a dialectical reason; by transferring it into the ‘natural’ world, and forcibly inscribing it there, Engels stripped it of its rationality:** there was no longer a dialectic which man produced by producing himself, and which, in turn, produced man; there was only a contingent law, of which nothing could be said except it is so and not otherwise. In short, Reason once more becomes a bone, since

it is merely a fact and has no knowable necessity. It so happens that opposites interpenetrate. Rationality is merely a final and universal law; and *therefore* it is irrationality pure and simple. However one looks at it, transcendental materialism leads to the irrational, *either* by ignoring the thought of empirical man, or by creating a noumenal consciousness which imposes its law as a whim, or again, by discovering in Nature ‘*without* alien addition’ the laws of dialectical Reason in the form of contingent facts.

...This long discussion has not been useless. It has enabled us to formulate our problem; it has revealed the conditions under which a dialectic can be established. No doubt these conditions are contradictory, but it is their moving contradictions which will throw us into the dialectical movement. Engels’ mistake, in the text we quoted above, was to think that he could extract his dialectical laws from Nature by non-dialectical procedures comparison, analogy, abstraction and induction. In fact, dialectical Reason is a whole and must ground itself by itself, or dialectically.

...(5) The dialectic, however, if it is to be a reason rather than a blind law, must appear as untranscendable intelligibility. The content, the development, the order of appearance of negations, of negations of negations, of conflicts, etc., the phases of the struggle between opposed terms, and its outcome – in short, *the reality* of the dialectical movement, is governed in its entirety by the basic conditions, the structures of materiality, the initial situation, the continuous action of external and internal factors, and the balance of the forces involved. Thus there is no *one* dialectic which imposes itself upon the facts, as the Kantian categories impose themselves on phenomena; but the dialectic, if it exists, is the individual career of its object. There can be no pre-established schema imposed on individual developments, neither in someone’s head, nor in an intelligible heaven; **if the dialectic exists, it is because certain regions of materiality are structured in such a way that it cannot not exist.** In other words, the dialectical movement is not some powerful unitary force revealing itself behind History like the will of God. **It is first and foremost a resultant; it is not the dialectic which forces historical men to live their history in terrible contradictions; it is men, as they are, dominated by scarcity and necessity, and confronting one another in circumstances which History or economics can inventory, but which only dialectical reason can explain.** Before it can be a *motive force*, contradiction is a result; and, on the level of ontology, the dialectic appears as the only type of relation which individuals, situated and constituted in a certain way, and on account of their very constitution, can establish amongst themselves. The dialectic, if it exists, can only be the totalisation of concrete totalisations effected by a multiplicity of totalising individualities. I shall refer to this as *dialectical nominalism*. Nevertheless, the dialectic cannot be valid for all the particular cases which recreate it, unless it always appears as *necessity* in the investigation which reveals it, nor is it valid unless it provides us with the key to the process which expresses it, that is, unless we apprehend it as *the intelligibility* of the process in question.

**Jean-Paul Sartre, *The Dogmatic Dialectic and the Critical Dialectic* (1960)**

It must be proved that a negation of a negation can be an affirmation, that conflicts – within a person or a group – are the motive force of History, that each moment of a series is *comprehensible* on the basis of the initial moment, though *irreducible* to it, that History continually effects totalisations of totalisations, and so on, before the details of an analytico-synthetic and regressive-progressive method can be grasped.

...In the end, this means that we are confronted once again with the need to establish the dialectic as the universal method and universal law of anthropology. And this amounts to requiring Marxists to establish their method *a priori*: whatever relations are investigated, there will never be enough of them to establish a dialectical materialism. Such an extrapolation – that is, an infinitely infinite extrapolation – is radically different from scientific induction. [as above, emphasis in the original]

...Marx's originality lies in the fact that, in opposition to Hegel, he demonstrated that History *is in development* that **Being is irreducible to Knowledge**, and, also, that he preserved the dialectical movement *both in Being and in Knowledge*. He was correct, *practically*. But having failed to *re-think the dialectic*, Marxists have played the Positivist game. Positivists often ask Marxists how they can claim, given that Marx had the good sense to realise that 'pre-history' had not yet come to an end, to detect the 'ruses' of History, the 'secret' of the proletariat, and the direction of historical development.

...But that is not all. For Hegel, as we have seen, the apodicticity [clearly established or beyond dispute] of dialectical knowledge implied the identity of *being, action and knowledge*. Marx, however, began by positing that material existence was irreducible to knowledge, that *praxis* outstrips Knowledge in its real efficacy. Needless to say, this is my own position. However, this position gives rise to new difficulties: how can we establish that one and the same movement animates these different processes? In particular, thought is both Being and knowledge of Being. It is the *praxis* of an individual or a group, in particular conditions, at a definite moment of History. As such, thought is subject to the dialectic as its law, just like the historical process, considered either as a whole or in its particular details. But it is also knowledge of the dialectic as Reason, that is, as the law of Being. But this presupposes an explanatory separation from dialectical objects, allowing us to unveil their movement. **Is there not an inevitable contradiction between the knowledge of Being and the being of knowledge? The demonstration that thought, as Being, is carried along in the same movement as the whole of history, does not dissolve all contradictions. In fact it is precisely to this extent that thought is incapable of grasping itself in the necessity of its own dialectical development.**

JK: Trying to understand: Humans exist. They have thoughts, they think. Thought is part of existence, of "Being." "Dialectics" may not exist, but if it does, it is entirely the doing of humans. But "thought" can't "grasp itself" (understand itself) because it is both "Being" and "knowledge of Being." So there is a question of whether "dialectics" can exist.

Sartre:

...If material being, *praxis* and knowledge are indeed irreducible realities, do we not have to appeal to a pre-established harmony in order to relate their developments? In other words, if the search for Truth is to be dialectical in its methods, how can it be shown *without idealism* that it corresponds to the movement of Being?

JK: Physics starts with terms it cannot define. It uses them, they work. Einstein and Feynman have made that point. In a way, physicists assume a "pre-established harmony" between "nature" and their math (and theories couched in words). It seems like Sartre's challenge ("how can it be shown *without idealism*") is a misplaced question. A question with no solution. Precisely because there

is nothing wrong with making certain basic assumptions and proceeding from there. It seems Sartre is not adhering to the thesis that practice resolves all such questions (and otherwise they are “academic”).

**Sartre:**

*6 The External Dialectic in Modern Marxism*

This difficulty has appeared insurmountable to modern Marxists. They have seen only one solution: to refuse to acknowledge thought itself as a dialectical activity, to dissolve it into the universal dialectic, and to eliminate man by dispersing him into the universe.

*9 The Domain of Dialectical Reason*

Must we then deny the existence of dialectical connections in inanimate Nature? By no means. Indeed, in the present state of our knowledge, I do not see that we are in a position to affirm or deny it. Every one is free either to believe that physico-chemical laws express a dialectical reason, or not to believe it. In any case, in the domain of the facts of inorganic Nature, the claim must be extra-scientific. We merely ask for the restoration of the order of certainties and discoveries: for if there is such a thing as a dialectical reason, it is revealed and established in and through human praxis, to men in a given society at a particular moment of its development. On the basis of this discovery, the limits and scope of dialectical certainty have to be established. The dialectic will be an effective method as long as it remains necessary as the law of intelligibility and as the rational structure of Being. A materialist dialectic will be meaningless if it cannot establish, within human history, the primacy of material conditions as they are discovered by the praxis of particular men and as they impose themselves on it.

JK: It’s a long way from Mao’s writings about and implementation of dialectics in the Chinese revolution to Sartre, who is not even certain that “dialectical reason” exists.

**Perspectives of Bernard e. Harcourt**, Introduction to Sartre’s *Critique of Dialectical Reason* (1960) <https://blogs.law.columbia.edu/critique1313/bernard-e-harcourt-introduction-to-sartres-critique-of-dialectical-reason-1960/?cn-reloaded=1>

Harcourt:

Sartre’s target may be somewhat of a straw man, represented best by Joseph Stalin and his essay *Le Matérialism dialectique et Le Matérialisme historique*. But nevertheless, the result is that Sartre constantly tries to complexify dialectical reason, to enrich it with psychoanalysis and cultural analysis, and to introduce the human being (and not just groups, such as the working class or the proletariat) back into the analysis.

...Sartre was never able to fully overcome the contradictions—which is reflected in the fact that he never finished his *Critique of Dialectical Reason* (Volume 2 was published uncompleted and posthumously in 1985) or his next and last project which evidently grew out of it (and is discussed throughout the Preface to the *Critique*), his study of Flaubert, *The Family Idiot*.

...Sartre ultimately calls his method the “progressive – regressive method.” The progressive aspect is more infused with a traditional (non-dogmatic) Marxist approach; but he supplements this with a heuristic, in his words: “Our method is heuristic; it teaches us something new because it is at



once both regressive and progressive.” Together the two represent a back-and-forth, a movement that both builds on economic analysis, but also pushes back by raising more questions and focusing our attention to the psychological, the biographical, and the symbolic dimensions.

...For a brilliant discussion and illustration of the potential of Sartre’s work, I recommend reading Lisa Guenther’s analysis of the California prison revolts of 2013 in the chapter, “[A critical phenomenology of solidarity and resistance in the 2013 California prison hunger strikes](#),” of *Body/Self/Other*, especially pages 56 to 65. There, Guenther not only presents Sartre’s praxis theory and critique of dialectical reason in an elucidating way, but also offers a concrete illustration of how it might work by focusing on the individual-turned-collective action of men at the supermax facility at Pelican Bay.

...Sartre’s relationship to Marxism, however, is not so black-or-white and does not reduce to anti- or pro-. Sartre is clearly writing against a certain style of Marxism, as noted earlier, a rigid, mechanistic Marxism that he associated with the French Communist Party. There are, however, enough other jabs at Marxism *tout cour* [simply, bluntly] that we must acknowledge a broader resistance to Marxist thinkers, surely university or academic Marxists and others. At the same time, there are famous passages where Sartre writes that existentialism is merely an ideological tweak that can serve to change Marxism, and that, if it succeeds, we will be left with Marxism and not existentialism.

“Far from being exhausted,” Sartre declares, “Marxism is still very young, almost in its infancy; it has scarcely begun to develop. It remains, therefore, the philosophy of our time. We cannot go beyond it because we have not gone beyond the circumstances which engendered it.” For Sartre, there is a dimension to Marxism that remains deeply compelling.

JK: Then, after all he wrote about Marxism and being a Marxist, we find:

Wikipedia:

However, despite aligning with the Maoists, Sartre said after the May [1967] events: "If one rereads all my books, one will realize that I have not changed profoundly, and that I have always remained an anarchist." He would later explicitly allow himself to be called an anarchist.

## **Louis Althusser**

Wikipedia

[https://en.wikipedia.org/wiki/Louis\\_Altusser](https://en.wikipedia.org/wiki/Louis_Altusser)

**Louis Pierre Althusser** (16 October 1918–22 October 1990) was a [French Marxist philosopher](#) who studied at the [École normale supérieure](#) in [Paris](#), where he eventually became Professor of Philosophy.

Althusser was a long-time member and sometimes a strong critic of the [French Communist Party](#) (*Parti communiste français*, PCF). His arguments and theses were set against the threats that he saw attacking the theoretical foundations of [Marxism](#). These included both the influence of [empiricism](#) on Marxist theory, and [humanist](#) and [reformist socialist](#) orientations which

manifested as divisions in the European communist parties, as well as the problem of the [cult of personality](#) and of [ideology](#). Althusser is commonly referred to as a [structural Marxist](#), although his relationship to other schools of French [structuralism](#) is not a simple affiliation and he was critical of many aspects of structuralism. He later described himself as a [social anarchist](#)

JK: Althusser changed his views over time -- considerably. He says at one point that Marx's writings are inconsistent and that his (Althusser's) earlier theses about Marx are no longer valid. Althusser seems to complexify Marx in different ways in different pieces.

**Althusser:** *On Marxism, Note on Dialectical Materialism*

<https://www.marxists.org/reference/archive/althusser/index.htm>

Marxism comes forward not only as the science of History (historical materialism), but also as dialectical materialism. Engels, Lenin, and Stalin have elaborated upon the latter aspect of Marxism in particular. It too is the object of lively controversies.

What are the most important of the Marxist texts dealing with this subject? The second Preface to *Capital*, Engels' *Anti-Dühring* (Part 1), *Ludwig Feuerbach* (ch. IV), and *Dialectics of Nature* (passim); Lenin's *Materialism and Empirio-criticism* (chapters I and II), *What 'The Friends of the People' Are* (pp. 163-74) and *Philosophical Notebooks* (Lenin's *Collected Works*, Vol. 38); Stalin's *Dialectical and Historical Materialism* and *Marxism and Linguistics*; Zhdanov's *On Philosophy* (in *On Literature, Music and Philosophy*); Mao Zedong's *On Contradiction* (in *Selected Readings from the Works of Mao Tse-tung*).

...No-one, perhaps, has put this better than Engels, in connection with the problem of the definition of life: 'From a scientific standpoint all definitions are of little value. In order to gain an exhaustive knowledge of what life is, we should have to go through all the forms in which it appears, from the lowest to the highest. ...' *Anti-Dühring*, p. 1041.

from *Overdetermination* (1962) [emphases in the original]

But, strictly speaking, it cannot be claimed that these contradictions and their fusion are merely the **pure phenomena** of the general contradiction. The 'circumstances' and 'currents' which achieve it are more than its phenomena pure and simple. They derive from the relations of production, which are, of course, one of the **terms** of the contradiction, but at the same time its **conditions of existence**; from the superstructures, instances which derive from it, but have their own consistency and effectivity from the international conjuncture itself, which intervenes as a determination with a specific role to play. This means that if the 'differences' that constitute each of the instances in play (manifested in the 'accumulation' discussed by Lenin) '**merge**' into a real unity, they are not '**dissipated**' as pure **phenomena** in the internal unity of a **simple** contradiction. The **unity** they constitute in this 'fusion' into a revolutionary rupture, *is constituted by their own essence and effectivity*, by what they are, and according to the specific modalities of their action. In *constituting* this **unity**, they *reconstitute* and complete their basic animating unity, but at the same time they also bring out its *nature*: the 'contradiction' is inseparable from the total structure of the social body in which it is found, inseparable from its formal **conditions** of existence, and even from the instances it governs; it is radically *affected by them*, determining, but also determined in one and the same movement, and determined by the various **levels** and instances of the social formation it animates; it might be called **over-determined in its principle**.

I am not particularly taken by this term *overdetermination* (borrowed from other disciplines), but I shall use it in the absence of anything better, both as an *index* and as a *problem*, and also because it enables us to see clearly why we are dealing with something *quite different from the Hegelian contradiction*.

...For however accurate and verified it may be in political practice, we have only so far used it *descriptively*, that is, *contingently*, and *like all descriptions* it is still at the mercy of any *philosophical* theory that happens to come along.

JK: Being verified in practice is the Marxist criterion, so from a Marxist perspective, what is Althusser's point?

Althusser:

...Here, then are the two ends of the chain: the economy is determinant, but *in the last instance*, Engels is prepared to say, in the long run, the run of History. But History 'asserts itself' through the multiform world of the superstructures from local tradition to international circumstance. Leaving aside the *theoretical solution* Engels proposes for the problem of the relation between determination *in the last instance* – the economic – and those determinations imposed by the superstructures – national traditions and international events – it is sufficient to retain from him what should be called the *accumulation of effective determinations* (deriving from the superstructures and from special national and international circumstances) *on the determination in the last instance by the economic*. It seems to me that this clarifies the expression *overdetermined contradiction*, which I have put forward, *this* specifically because the existence of overdetermination is no longer *a fact* pure and simple, for in its essentials we have related it *to its bases*, even if our exposition has so far been merely gestural. This *overdetermination* is inevitable and thinkable as soon as the real existence of the forms of the superstructure and of the national and international conjuncture has been recognised – an existence largely specific and autonomous, and therefore irreducible to a pure *phenomenon*. We must carry this through to its conclusion and say that this overdetermination does not just refer to apparently unique and aberrant historical situations (Germany, for example), but is universal; the economic dialectic is never active *in the pure state*; in History, these instances, the superstructures, etc. – are never seen to step respectfully aside when their work is done or, when the Time comes, as his pure phenomena, to scatter before His Majesty the Economy as he strides along the royal road of the Dialectic. From the first moment to the last, the lonely hour of the 'last instance' never comes.

In short, the idea of a 'pure and simple' non-overdetermined contradiction is, as Engels said of the economist turn of phrase 'meaningless, abstract, senseless'. That it can serve as a pedagogical model, or rather that it did serve as a polemical and pedagogical instrument at a certain point in history does not fix its destiny for all time. After all, pedagogic systems do change in history. It is time to make the effort to raise pedagogy to the level of circumstances, that is, of historical needs. But we must all be able to see that this pedagogical effort *presupposes* another purely theoretical effort. For if Marx has given us the general principles and some concrete examples (*The Eighteenth Brumaire*, *The Civil War in France*, etc.), if all political practice in the history of Socialist and Communist movements constitutes an inexhaustible reservoir of concrete 'experiential protocol', it has to be said that *the theory of the specific effectivity of the superstructures and other*

*'circumstances' largely remains to be elaborated;* and before the theory of their effectivity or simultaneously (for it is by formulating their effectivity that their essence can be attained) there must be elaboration of *the theory of the particular essence of the specific elements of the superstructure*. Like the map of Africa before the great explorations, this theory remains a realm sketched in outline, with its great mountain chains and rivers, but often unknown in detail beyond a few well-known regions. Who has *really* attempted to follow up the explorations of Marx and Engels? I can only think of Gramsci. But this task is indispensable if we are to be able to express even propositions more precise than these approximations on the character of the *overdetermination* of Marxist contradiction, based primarily on the existence and nature of the superstructures.

JK: Trying to understand. Althusser seems to be saying that we need to understand more about “overdetermination” in order to...what? Understand better? Make revolution better? Many Marxist revolutions have been attempted and some have been made. Of course with many errors, as Mao and Lenin made clear. Errors before, during and after. Just how will better understanding “overdetermination” help? Perhaps this has been spelled out and shown in practice somewhere. I've been largely, but not entirely, out of touch with revolutionary history and developments the past 30 years. If so, I hope to learn about it.

**Althusser, *For Marx***

<http://www.marx2mao.com/Other/FM65i.html>

...It should be noted, *vis-à-vis* Engels's *model*, that every scientific discipline is based *at a certain level*, precisely that level at which *its concepts find a content* (without which they are the concepts of nothing, that is, they are not concepts). Such is the level of Marx's *historical theory*: the level of the concepts of *structure, superstructure and all their specifications*. But if *the same scientific discipline* should set out from *another level than its own*, from a level which is not the object of *any scientific knowledge* (such as, in our case, the genesis of individual wills from the infinity of circumstances and the genesis of the final resultant from the infinity of parallelograms . . .), to produce *the possibility of its own object and of the concepts corresponding to it*, then it will fall into an *epistemological void*, or, and this is what gives it its vertigo, into a *philosophical fullness*.

JK: Letter by Althusser in 1978 to Merab Mamardachvili reflects on the pretensions of his own writings 15 years earlier but also an inevitability in the sequence of them. “Rectify, rectify, something will always remain behind...”

<https://www.marxists.org/reference/archive/althusser/1978/mamardachvili.htm>

**Althusser, *Lenin before Hegel* (1969)**

<http://www.marx2mao.com/Other/FM65i.html>

In a lecture now a year old, published in a small volume by Maspero under the title *Lenin and Philosophy*, I have attempted to prove that Lenin should be regarded as having made a crucial contribution to dialectical materialism, in that he made a real discovery with respect to Marx and Engels, and that this discovery can be summarized as follows: Marx's scientific theory did not lead to a new philosophy (called dialectical materialism), but to a new practice of philosophy, to be precise to the practice of philosophy based on a proletarian class position in philosophy.

This discovery, which I regard as essential, can be formulated in the following theses:

1. Philosophy is not a science, and it has no object, in the sense in which a science has an object.
2. Philosophy is a *practice* of political *intervention* carried out in a theoretical form.

JK: I think Marx's Second Thesis on Feuerbach carries the same implication as #2. It calls into question the advisability, at least under socialism, of establishing departments of philosophy removed from resolution of issues in practice. The same issue was a point of contention in Russia in the early years after the 1917 revolution.

[Althusser continues with aspects of Lenin's agreement with Hegel's criticisms of Kant's thing-in-itself. "Objectivism" is said to be in play here as opposed to the subjectivism of Kant and Hegel.]

But it enables us to reveal a number of important consequences nonetheless. Let us run through them.

The critique of Kant's transcendental subjectivism contained in the selective reading in which Lenin 'lays bare' Hegel entails:

1. the elimination of the thing-in-itself and its reconversion into the dialectical action of the identity of essence and phenomenon;
2. the elimination of the category of the Subject (whether transcendental or otherwise);
3. with this double elimination and the reconversion of the thing-in-itself into the dialectical action of the essence in its phenomenon, Lenin produces an effect often underlined in *Materialism and Empirio-criticism*: the *liberation of scientific practice*, finally freed from every dogma that would make it an ossified thing, thus restoring to it its rightful living existence – this life of science merely reflecting the life of reality itself.

...We move from paradox to paradox. I have just said that what interests Lenin in Hegel is the criticism of Kant, but from the point of view of scientific objectivity – and not from the point of view of its truth, which, to be brief, is represented in Hegel by the Absolute Idea. And yet, Lenin is passionately interested in the Chapter on the Absolute Idea, which he sees as almost materialist: ...The untenable thesis upheld by Marx in the *1844 Manuscripts* was that History is the History of the process of alienation of a Subject, the Generic Essence of Man alienated in 'alienated labour'.

But it was precisely this thesis that *exploded*. The result of this explosion was the evaporation of the notions of subject, human essence, and alienation, which disappear, completely atomized, and the liberation of the concept of a process (*procès* or *processus*) *without a subject*, which is the basis of all the analyses in *Capital*.

...Allow me to recall that this divination of Hegel by Lenin, and then his reading of Hegel, were only possible from a proletarian class viewpoint, and with the new practice of philosophy that follows from it.

JK: Now in 2024, what has become of the idea of “proletarian class viewpoint”? It suffers, in various ways, in many corners of Marxism since the Western industrial proletariat has not “lived up to its historical role.” Even from Althusser’s point of view, the proletariat (and its class view) is after all just one of many factors of ‘overdetermination’. Given the strong role of the peasantry in 20<sup>th</sup> C revolutions, albeit allegedly subservient to the working class (Russia, China, Vietnam, Cuba...), does Marxist ‘scientific practice’ stem only from the proletariat, in particular the industrial proletariat? It would appear not.

Althusser, *Lenin before Hegel*, Notes

<https://www.marxists.org/reference/archive/althusser/1969/lenin-before-hegel.htm>

[Cites a note by Lenin:]

*Sehr gut!!* [Very good!] If we ask what Things-in-themselves are, so *ist in die Frage gedankenloser Weise die Unmöglichkeit der Beantwortung gelegt* [the question, in thoughtlessness, is so put as to render an answer impossible] ...This is very profound: ...the Thing-in-itself is altogether an empty, lifeless abstraction in life, in movement, each thing and everything is *usually* both “in itself” and “for others” in relation to an Other, being transformed from one state to the other’. ‘In Kant [we have] “the empty abstraction” of the Thing-in-itself instead of living *Gang*, *Bewegung*, deeper and deeper, of our knowledge about things’.

Althusser, *Lenin and Philosophy* (1971)

JK: Lenin differentiates what he is doing from academic philosophy. Essentially expanding on Marx’s Second Thesis on Feuerbach. This is a good piece by Althusser, maybe the best one of his on the site (marxists.org). Engels, *Anti-Dühring*. “a different philosophical practice” is what Marx’s *Theses* prefigure. Except Althusser seems to hold that Marx was creating a “new science” -- though then says he is not. We’d best reserve “science” for actual sciences (physics, chemistry, etc.). Althusser feels Marxist philosophy had to lag behind Marxist science -- we don’t yet have a developed Marxist philosophy. Althusser considers simply doing philosophy (as in his essays) to be “philosophical practice.” But this omits the “this-sidedness” of what he is doing. It remains speculative.

Althusser discusses the claim that every philosophy represents a class (Lenin - also Mao). But is there always a petty-bourgeois philosophical position, a proletarian position, a bourgeois position? How do we know that? Are there some issues and instances where this approach is harmful rather than helpful? I would say given the contentiousness and hair-splitting found in so much Marxist discourse ever since Karl Marx, that it’s obvious that abuses of “class stand” and “class position” have been rampant, and movements and organizations have suffered greatly from it.

Althusser, *Lenin and Philosophy*

<https://www.marxists.org/reference/archive/althusser/1968/lenin-philosophy.htm>

Less than ever can we say that Marxism is a new philosophy: a philosophy of praxis. At the heart of Marxist theory, there is a science: a quite unique science, but a science. What is new in Marxism’s contribution to philosophy is a new *practice of philosophy*. *Marxism is not a new practice of philosophy of praxis, but a (new) practice of philosophy*.

Lenin said himself: I am not a philosopher, I am badly prepared in this domain (*Letter to Gorky*, 7 February 1908). Lenin said: I know that my formulations and definitions are vague, unpolished; I

know that philosophers are going to accuse my materialism of being ‘metaphysical’. But he adds: that is not the question. Not only do I not ‘philosophize’ with their philosophy, I do not ‘philosophize’ like them at all. Their way of ‘philosophizing’ is to expend fortunes of intelligence and subtlety for no other purpose than to *ruminate in* philosophy. Whereas I treat philosophy differently, I *practice* it, as Marx intended, in obedience to what it is. That is why I believe I am a ‘dialectical materialist’.

JK: Althusser appears to take liberties with the actual content of Lenin’s letters to Gorky on this subject (cited earlier in the Sourcebook).

JK: Despite my reservations about “overdetermination” and other of Althusser’s views, he raises concerns I’ve long had myself about “philosophy” as an academic discipline in itself and particularly in socialist countries. In the Soviet Union it is widely agreed that dialectics became ossified. Evald Ilyenkov was one Soviet philosopher who tried to break away from the stagnation. One wonders about how Marxist philosophy has fared in other socialist countries. I don’t have enough background to offer an opinion on that point. It seems, though, that a great deal of philosophical production in such countries became apologetics for the governing leader and party -- of which there has been no shortage.

## **Rosa Lichtenstein**

**Rosa Lichtenstein** is a Marxist/Trotskyist in the United Kingdom. There is no Wikipedia entry on her but she describes her background in this interview.

<https://symptomaticcommentary.wordpress.com/2014/05/11/interview-with-rosa-lichtenstein-archive/>

Rosa Lichtenstein writes:

<http://anti-dialectics.co.uk/page%2001.htm#Background>

I studied for a BA Honours in Philosophy at The University of XXXX in the late-1970s, then for a PhD in the early 1980s, and later for a Mathematics degree. After I became involved in revolutionary politics in the early 1980s I decided to write at some point a thorough-going refutation of DM, having come to appreciate the pernicious and deleterious effect it has had on revolutionary socialism in particular, and the international workers' movement in general, over the last 140 odd years. The publication of John Rees's book in 1998 simply provided me with the impetus I needed.

...I count myself as a Marxist, a Leninist and a Trotskyist since I fully accept, not just HM [Historical Materialism] (providing Hegel's influence has been completely excised), but the political ideas associated with the life, work and revolutionary practice of Marx, Engels, Lenin, Luxemburg, and Trotsky.

<http://anti-dialectics.co.uk/page%2001.htm#Background>

... However, even though I have studied logic and philosophy to PhD level, and have a mathematics degree, *I still can't make any sense of DM.* [Dialectical Materialism]

My political views had swung sharply to the left much earlier; that occurred as a result of the very minor part I played in the UK Postal Workers' strike of 1971 -- I had at that time been a postal worker since 1969. This put me in direct sympathy with the left of the Labour Party (as it then was). Several years later, at the above University, I was introduced to Marxist Humanism by one of my tutors -- a truly remarkable man who possessed the rare gift of being able to explain Marxism in simple, everyday language, expressing Historical Materialism [HM] in eminently comprehensible and ordinary terms free of the usual Hegelian jargon and Hermetic obscurities.

However, right from the start I was put off Marxism by the philosophical and logical confusion I encountered when reading books and articles on DM -- a theory I thought unworthy of acceptance by anyone with genuinely materialist sympathies -- as well as other publications expounding what can only be called, Hegelianised Marxism.

My antipathy toward the tradition from which DM had sprung was significantly amplified by the training I received in Analytic Philosophy from a group of first-rate Philosophers and Logicians at the above University (most of whom were prominent Wittgensteinians and/or Fregeans). This ensured that I would never take Hegel or DM seriously.

And that is still the case forty years later!

JK: Her name can be construed as a tribute to Rosa Luxemburg and Ludwig Wittgenstein.

#### **From the interview:**

These comrades rarely if ever stop and think how it is that they can so effortlessly derive fundamental theses, true for all of space and time, about 'Being', 'consciousness', 'subjectivity', 'essence', etc., etc., from a handful of words/concepts, all in the comfort of their own heads. Indeed, it seems quite natural and uncontroversial to do this. Well, as Marx noted, the ideas of the ruling-class always rule.

<https://symptomaticcommentary.wordpress.com/2014/05/11/interview-with-rosa-lichtenstein-archive/>

#### **Rosa praises Eric Petersen's *The Poverty of Dialectical Materialism***

SYNOPSIS of Petersen

Chapters. (1) The Marxist tradition has never completed a comprehensive statement of its philosophy. Consequently, dialectical materialism has wrongly occupied centre stage.

(2) Philosophy is the vanguard of science.

(3) The Dialectic, as postulated by philosophy, is a process of constant change and development which is driven by internal contradictions and present in all things.

(4) Marx and Engels based their political theory upon the dialectic of history, and

(5) speculated that identical processes were present in nature.

(6) Most Marxists have thought that nature is dialectical and that Marxism is a theory of politics and nature. (a) Plekhanov first coined dialectical materialism and popularised the view that Marxism was a guide to nature. (b) The Second International de-humanised Marxism's social philosophy. (c) Lenin restored human creativity in social philosophy, but popularised Plekhanov's view of nature. (d) Stalinism turned dialectical materialism into an authoritarian state religion. (e)



Mao used dialectical materialism to justify Stalinist politics in China. (f) Trotsky used dialectical materialism to misunderstand Stalin's counter-revolution. (g) Most Trotskyists are loyal to Trotsky on this point, even though it doesn't assist their politics. (h) Not all Marxists agree, but none have formulated a coherent critique of dialectical materialism. (i) It is necessary to assault dialectical materialism on its own terms, and test it against natural science.

- (7) Natural science is the best guide to nature.
- (8) Dialectical materialism does not assist natural science.
- (9) Human society is based upon conscious human labour; it obeys laws that are fundamentally different to natural laws.
- (10) The materialist conception of history is a guide to history and political science.
- (11) Dialectical materialism is useless in politics.
- (12) The associated Marxist philosophy of nature is: materialism, atheism, and support for the potential of natural science under rational human control.

Appendices. (A) Dialectical logic is useful in political theory. (B) Engels' attempts to apply dialectics to nature were a product of the Marx-Engels relationship. (C) Marx and Engels applied historical materialism in their practical politics. (D) Trotsky, when not talking dialectical materialism, made major contributions to Marxism.

#### **Review by Rurik Davidson of Petersen's book**

JK: Quite critical and notes other attempts to drive dialectics out of revolutionary theory and practice

<https://www.greenleft.org.au/content/challenging-philosophy-marxism>

#### **Discussion with Rosa Lichtenstein and others**

[https://en.wikipedia.org/wiki/Talk%3ADialectical\\_materialism](https://en.wikipedia.org/wiki/Talk%3ADialectical_materialism)

#### **Interview with Rosa Lichtenstein**

<https://libcom.org/library/anti-dialectics>

JK: [paraphrasing/summarizing her arguments]

Engels and other Marxists are vague and confused. Example: Engels says he isn't imposing laws of dialectics on nature but then finds three laws. Example: Engels on motion as a contradiction. Offered no evidence. Brief description ascribed to entire universe. For example, we are never told how far apart the two proposed places are that a moving object is supposed to occupy while at the same time not occupying one of them. Furthermore, if there is no before or after here, there can be no during, either.

Rosa Lichtenstein:

<https://libcom.org/article/anti-dialectics>

Do these 'contradictions' increase in number, or stay the same, if an object speeds up? Or, are the two locations depicted by Engels just further apart? That is, are the two points that an accelerating body occupies at the same moment further apart? If they aren't, and if that body occupies these two at the same time, *it can't have accelerated*. That is because speeding up involves covering the *same distance in less time*, but that isn't allowed here -- since, and once more, such a body is

in both places at the same time. On the other hand, if they are further apart the theory faces the problems outlined in sentences (E1)-(E13), below. [not included here]

...The next problem with this 'theory' is that it is in the end incoherent.

...Marx began his drift away from Hegel and philosophy back in the 1840s (the textual evidence for that allegation has been posted [here](#)). My contention is that by the time he came to write *Das Kapital*, Marx had abandoned Hegel, root-and-branch.

[Says Marxists are inconsistent about opposites: do they become each other or just change positions?]

Whilst the writer pictures what he takes to be actually **my method**, in this striking and [as far as concerns my own application of it] generous way, **what else is he picturing but the dialectic method?** [Marx, *Das Kapital*. Bold emphases added.]

In the above passage *not one single Hegelian concept is to be found* -- no "contradictions", no change of "quantity into quality", no "negation of the negation", no "unity and identity of opposites", no "interconnected Totality", no "universal change", etc., etc. -- and yet Marx *still* calls this the "dialectic method", and says of it that it is "my method." So, Marx's "method" has had Hegel *completely excised* --, except for the odd phrase or two, "here and there", with which he merely "coquetted", as he later notes.

...Can you imagine it! One wonders how often the rapidly ageing Marx must have nodded off, not fully realising the nature of what it was that some would later claim he accepted! But, why read it *to* Marx? Were his eyes and his brain failing him? Moreover, if Marx contributed a chapter (which he did), why didn't Engels simply ask him to read the proofs? And, it is rather odd, too, that Engels never claimed this of any of his other published work -- that he had read it *to* Marx.

JK: Rosa Lichtenstein questions if Marx agreed with Engels but various accounts suggest Marx did approve.

Lichtenstein:

There are two Marxist dialecticians that I agree with most, and whose work is definitely worth mentioning. The first is the late [Guy Robinson](#). I have posted Guy's unpublished book - *Philosophy and Demystification* - [at my site](#), where I have also added these thoughts:

...The other author with whom I agree the most is Eric Peterson, whose book, *The Poverty of Dialectical Materialism*, is the best -- and, as far as I know, the *only* -- published work that is wholly devoted to an attack on the application of DM to nature written by a revolutionary Marxist. Several years ago, Eric promised a second edition; if and when it comes out I hope he deletes the comments he made about Formal Logic in one of the appendices, which were, alas, ill-informed and only detracted from his overall argument. While I don't agree with everything Petersen says (for example, what he writes about the nature of Philosophy and the application of 'the dialectic' to human development and the class war), his book is easily the closest to my own work, and I learnt much from it.

"A consistent materialism cannot proceed from principles which are validated by appeal to abstract reason, intuition, self-evidence or some other subjective or purely theoretical source. Idealisms may do this." [*The Origin of Materialism.*]

...But, if there is a 'rational order' beneath 'appearances', then, ultimately, the universe must be mind-like, No wonder Marx asserted that "Philosophy is nothing else but religion rendered into thought."

S: How does Dialectical Materialism render Dialectical Marxists unable to understand the dynamics between the base and superstructure?

R [Rosa]: I don't think it does render them *unable* to do what you say -- except perhaps when they speak about the contradiction between, for example, the forces and relations of production. If that *were* the case, [according to the DM-classics](#), *the forces and relations of production would have to struggle with, and then change into, each other!* Has anyone ever witnessed, say, a transport system struggling with and then changing into the relations of ownership and control? Crazy ideas like these, that trip so easily off the tongues of dialecticians, undermine the scientific stature of HM -- as well as the credibility of Marxist theorists -- and only serve to mystify the relation between base and superstructure.

...R: In my experience *they are all dogmatists when it comes to DM*. That is because of the dogmatic nature of Traditional Thought, and the fact that those who founded Marxism and invented DM weren't workers. They came from a class that educated their children to believe there *really was* a 'hidden world' lying behind 'appearances', which governed everything in existence (again, as part of their religious education). So, when they became revolutionaries, they looked for 'logical' principles relating to this abstract world that told them that change was inevitable and part of the cosmic order. Enter dialectics, courtesy of the dogmatic ideas of that ruling-class mystic, Hegel. Hence, the dialectical classicists latched onto this theory and were happy to [impose it on the world](#) (upside down or the "right way up"). As a result of their education, it seemed quite natural for them to do this -- [since that is how 'genuine' philosophers should behave](#). Or so they had been socialised to believe.

...R: The problem here is that, like Metaphysics in general, DM is incoherent non-sense, so it is actually impossible to put it into practice.

JK: How then were the Russians and Chinese, and many others as well who relied on DM, able to conduct successful revolutions? Just dumb luck?

### **My written exchanges with Rosa Lichtenstein**

JK: Let's have a look at how difficult it can be when entering the realm of anti-dialectics to introduce an unusual topic like remote viewing to a person with the Wittgensteinian mindset of Rosa Lichtenstein.

Two decades after the New Communist Movement had expired, I came across the views of Rosa Lichtenstein online and started a conversation. Here is an extended extract from the correspondence.

To bring out our differences on language and philosophy, I attempted to explain to Rosa L. what remote viewing was. Rosa professed not to understand what I could possibly be referring to. So I tried again:

JK: Which is more important, the experience one has or the words that attempt to capture that experience? That seems to be the root of our difference here. I will go into this below not because it involves RV, or to talk specifically about RV, but because it exemplifies a decisive difference in our approaches to the relation between language and experience.

I maintain that I have through direct experience in doing remote viewing sessions over many years obtained useful information in the form of words and sketches; information that is not obtainable by our ordinary everyday senses - our eyes, ears, nose, etc. The information "shouldn't be" obtainable, but it is. "Shouldn't be" because the objective or target is not within the usual range of our senses. For example, the target (which is unknown to the viewer as the viewer does a remote viewing session) may be a distant location or an event or object at that location. The information remote viewers get is of various types - e.g. visual (e.g. shapes and colors), tactile, smells, tastes, concepts (not an inclusive list). At times one names the target; e.g. "Hoover Dam."

The term "remote viewing" is most often used to name this field, but it could as well be called "remote sensing." Some in fact prefer that term. It has also been called "anomalous cognition."

It is not a question of using a word like "view" or "remote" in a "new and as-yet unexplained sense" [as Rosa had claimed] -- it is a question of experiencing something new and "as-yet-unexplained" and what to make of it. RV is unexplained because while we have methods and procedures that can make for the successful practice of RV, we do not know the mechanisms, the underpinnings in physics/biology that explain the phenomenon. Put another way, the words used to describe the process vary, but what is most important is the phenomenon itself - its newness, strangeness, inexplicability, its import -- in terms of current science.

In science, data trumps theory, as one physicist friend (who is also a remote viewer) put it to me. If soundly obtained data (repeatable experiment, etc.) contradicts a theory, then the theory will need to be modified, not the data. In regard to RV, unexpected data is there, and our present ideas of physics, biology, and psychology cannot explain how we get the data. Or if they do, we don't understand how they do so yet. We lack a theory of why these experiences occur, despite more than 20 years of scientific investigation of RV. The problem is not a new one, though; it goes back for as long as psi has been investigated, RV being a form of psi.

To argue that I am "mis-using" words, as you do argue, seems to me to elevate linguistic philosophy over experience; in this case, over my direct experience. It appears, one could say, that you fetishize linguistic analysis. Put otherwise, you "privilege"/elevate linguistic analysis over direct experience; I reverse the primacy. This addresses the issue of the "limits of philosophy,"

which we touched on briefly earlier. I see a limit to the scope and power of language philosophy here; apparently you don't.

This is puzzling because in an earlier email, you say:

“And I agree with you about Marx, which is why in my essays I reject all of philosophy (and not just DM) as confused hot air.”

Are not analytic philosophy, linguistic philosophy – philosophies? If so, how can they be a basis for rejecting direct experience? Samuel Johnson kicked the stone - a case *not* of “enough said” but of “enough done.” As I said, that makes good sense to me. Philosophers may not consider it a satisfactory refutation, but as a Marxist I do.

Further, revisiting what you say:

“If some [one] claims that it is possible to 'remotely view' something, then they must be using the word "remote" and/or the word "view" in a new and-as-yet-unexplained sense. If so, what is it? But RV-ers *aren't* using these words in a new sense (otherwise their claims would be uninteresting). That means they are *mis-using* these words, which renders their ideas non-sensical.”

Based on what I say above, I hope you can see why I don't agree with:

“they must be using the word ‘remote’ and/or the word ‘view’ in a new and-as-yet unexplained sense.”

Again, it is not a question of word usage. One could say these particular words (“remote”, “view”) are being used as metaphors in this case, because we don't actually see the objective/target when we “remote view.” But that isn't the nub of the issue. The nub is what is being experienced and conveyed. (Besides, metaphors are vital to our communications using language. I have learned a lot in this regard from Lakoff, Johnson and others of the Embodied Mind school.)

As above also, if we call the RV process “anomalous cognition”, we are not misusing those words. The terms are but another attempt to convey a certain kind of process and experience.

JK: And so ended my attempt to convey to Rosa Lichtenstein that there is something called remote viewing, which is real enough that the U.S. Department of Defense spent over \$20 million on research and operations over a period of 20 years. Rosa's extreme resistance to understanding what remote viewing is comes down to, in my opinion, willful ignorance based on linguistic fetishism. It is of a piece with Chomsky's feigned ignorance about dialectics. (See Appendix 5).

## Further sources

**Adorno**, *Negative Dialectics*

<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100227235>

Quotation from Oxford:

A new form of dialectical thinking developed by Theodor Adorno in *Negative Dialektik* (1966), translated as *Negative Dialectics* (1973), which many regard as his magnum opus. Written with the explicit aim of radicalizing western philosophy as a whole by generating a mode of what he termed non-identity thinking, *Negative Dialectics* offers a bold programme for an immanent and self-reflexive critique of philosophy rather than a specific concept. This programme can be understood as the attempt to resolve, though not once and for all, two different problems: first, if concepts are not identical with their objects then in a certain sense they are inadequate to the task of defining objects; second, if we are aware of this, but accept that philosophy has no other resource for understanding and defining objects except the concept, then we have to figure out how to create an adequate form of philosophy using means we know to be inadequate. Concepts cannot be identical with objects by definition. So this isn't simply a problem of a poorly conceived concept that could be remedied by creating a better concept. The problem is exacerbated by the fact that both concepts and objects change over time. Thus, every concept has a history and is embedded within history. Adorno's solution to this twofold problem is to build a critique of concepts into his critique of philosophy. Since this is a working with (rather than a resolving of) the fundamental problem of the inadequacy of concepts it is described as *negative dialectics*. That is to say, it is a restless form of thinking which does not proceed from, or expect to arrive at a transcendental or transcendent ground or principle. Negative dialectics directs philosophy to confront the interfaces between concepts, objects, ideas, and the material world.

JK: It will be obvious by now that I don't agree with Adorno's project as stated here. It appears Adorno also doesn't accept Marx's dictum in the second *Thesis on Feuerbach*. He appears to be after a self-sufficient philosophy, one based entirely on ideas.

**Pratt and Zhao**, *Daoist Critique of Dialectics*.

JK: Uses Adorno to criticize Kant, Hegel, Marx. Holds that all of dialectics is flawed. The Daoist approach of harmonious units is said to be the way to go.

**Cadell Last**, *A Reflective Note for Dialectical Thinkers*, *International Journal of Žižek studies*, Vol. 12, No. 4. 2018

ABSTRACT: The dominant forms of thought today exist as either deconstructive or metalinguistic structures. Here we attempt to situate dialectical thinking as a constructive meta-mediation of this opposition between deconstruction and metalanguage. Dialectical thinking offers us a way to think about the processual nature of reason itself as a force of thought mediating being. In this mode of understanding we attempt to think the possibility of articulating the meaning and importance of 'metaontology' defined as the ontology of epistemology. In a metaontology we treat the structure of concepts not as reflecting external territory (map is territory), nor as existing at a distance from external territory (map is not the territory), but as having their own territory (geometry) (i.e. maps as territory). We attempt to approach metaontology by reflectively observing the singularity of the author's own internal territorial map, revealing a 'quadratic twisted circularity'; and also the movement of the symbolic order itself, revealing a possible invariant unsymbolizable real. From these reflections we dive into the foundations of dialectical thinking, starting with Plato, and then exploring modifications introduced by Hegel and Lacan. Finally, we offer a dialectical structure of knowledge for the 21st century. This offering is meant only as an offer, a consideration, for how dialectics can be deployed at the location of key antagonisms in the contemporary field. The hope

is that future dialecticians will be able to utilize this logic to engage in crucial intellectual interventions.

JK: Last's article exemplifies "Philosophy for Thought's Sake" or "practice be damned". The contents of the *International Journal of Žižek Studies* bear witness to ceaseless jazzed-up obscurities about unresolvables as hot-shot academics frolic and fart around to bolster their resumes -- and achieve precisely what in the world?

**Nathan Coombs**, *Rejecting both Mao and Deng: Slavoj Žižek and Waiting for the Leftist Critique to Come*. *International Journal of Žižek Studies*, Vol 2, No. 2. 2008

<http://zizekstudies.org/index.php/IJZS/issue/view/8>

JK: A very anti-Mao screed by Coombs.

## Chapter 4 Dialectical Materialism and Science

This chapter contains materials on dialectical materialism and science by Marx, Engels, Karl Schorlemmer, Leon Trotsky, J.D. Bernal, and J.B.S. Haldane, late 19<sup>th</sup> and early 20<sup>th</sup> Century authors, with all but Schorlemmer being (explicit) Marxists.

Background point: in the division of labor that Marx and Engels agreed on, Engels was to focus on science.

### For reference, from Wikipedia:

[https://en.wikipedia.org/wiki/Friedrich\\_Engels](https://en.wikipedia.org/wiki/Friedrich_Engels)

**Friedrich Engels**, *Herr Eugen Dühring's Revolution in Science* (1878)

Popularly known as *Anti-Dühring*, this book is a detailed critique of the philosophical positions of [Eugen Dühring](#), a German philosopher and critic of Marxism. In the course of replying to Dühring, Engels reviews recent advances in science and mathematics seeking to demonstrate the way in which the concepts of dialectics apply to natural phenomena. Many of these ideas were later developed in the unfinished work, *Dialectics of Nature*. Three chapters of *Anti-Dühring* were later edited and published under the separate title, *Socialism: Utopian and Scientific*.

**Engels**, *Socialism: Utopian and Scientific* (1880)

In this work, one of the best-selling socialist books of the era, Engels briefly described and analyzed the ideas of notable utopian socialists such as [Charles Fourier](#) and [Robert Owen](#). Engels pointed out their strongpoints and shortcomings, and provided an explanation of the scientific socialist framework for understanding of capitalism, and an outline of the progression of social and economic development from the perspective of [historical materialism](#).

**Engels**: *Dialectics of Nature* (1883)

*Dialectics of Nature* is an unfinished 1883 work by Engels that applies Marxist ideas, particularly those of dialectical materialism, to science. It was first published in the Soviet Union in 1925.  
[End Wikipedia]

JK: Let's continue with an account of an exchange of views by Marx, Engels and their contemporary, scientist Karl Schorlemmer.

**Angus, Ian**, *Marx and Engels and the Red chemist, The Forgotten Legacy of Karl Schorlemmer* (2017)

<https://climateandcapitalism.com/2017/03/21/marx-and-engels-and-the-red-chemist/>

Angus:

As they wrote in 1846, in the first fully developed account of historical materialism: “We know *only a single science*, the study of history. One can look at history from two sides and divide it into the history of nature and the history of men. The two sides are, however, inseparable; the history of nature and the history of men are dependent on each other so long as men exist.”

Karl Marx and Frederick Engels, *The German Ideology* (1847), *MECW*, vol. 5 (London: Lawrence and Wishart, 1976), 28n.

[Angus quotes a letter by Engels (on transformation of quantity into quality):]



(c) Mechanics of contact—bodies in contact. Ordinary mechanics, levers, inclined planes, etc. But this does not exhaust the effects of contact. Contact is manifested directly in two forms: friction and impact. It is a characteristic of both that, at certain degrees of intensity and under certain conditions, they give rise to new effects, no longer of a merely mechanical nature: heat, light, electricity, magnetism.

(2) Physics proper, the science of these forms of motion, establishes the fact, after investigating each form of motion separately, that they merge into one another under certain conditions, and ultimately discovers that given a certain degree of intensity, which varies for different moving bodies, they all produce effects that transcend physics; changes in the internal structure of bodies—chemical effects.

(3) Chemistry. In the case of the preceding forms of motion it was more or less immaterial whether the bodies under investigation were animate or inanimate. In fact inanimate objects revealed the nature of the phenomena involved in their greatest purity. Chemistry, on the other hand, can only discover the chemical nature of the most important bodies by using substances deriving from the life process. Its principal task is increasingly that of producing these substances synthetically. It forms the transition to the science of organisms, but the dialectical point of transition can only be constructed when chemistry has effected the real transition or is on the point of doing so.

(4) Organism—for the present I shall not indulge in any dialectical speculations on the subject.

[Angus continues]

...If, as some critics claim, Marx rejected the application of dialectics to non-human nature, Engels would likely have expected and received sharp criticism—for Marx was never reluctant to argue. But Marx did not object, nor did he assume that his own understanding of dialectics qualified him to judge Engels's thoughts on natural science. Instead, he replied that he had learned much from Engels's letter (it "edified me greatly") but would "venture no judgment until I have had time to reflect on the matter and consult the 'authorities.'" The "authorities," of course, meant Carl Schorlemmer—on such matters, Marx deferred to a professional. His letter concludes: "Schorlemmer read your letter and says that he is essentially in agreement with you but reserves his judgment on points of detail."

...Later, while preparing the second edition of his book *The Rise and Development of Organic Chemistry*, Schorlemmer added a quotation from *Anti-Dühring*—giving Engels full credit—to explain how quantity changes to quality in the various hydrocarbons: "Each new member is brought into existence by the addition of CH<sub>2</sub> to the molecule of the preceding one, and this quantitative change in the molecule produces every time a qualitatively different body."

[A note on *Anti-Dühring* by Adrian Chan-Wyles PhD]

<https://buddhistsocialism.weebly.com/wolf-grigorevich-messing-1899-1974---soviet-telepath.html>

In 1883, Friedrich Engels' book entitled the 'Dialectics of Nature' - although unfinished - had taken its substantive shape. The majority of this book's content was compiled over a ten year period (i.e. 1873-1883) and it is known that Karl Marx was either directly or indirectly involved

in much of its writing. After the death of his friend in 1883, Engels shouldered much of the work previously undertaken by Marx, and although Engels continued to edit his text and work on its notes until around 1886 (signifying a thirteen year effort), he no longer had the time to substantially add to its theoretical content. The bulk of this book remained unpublished in its entirety until its first edition in 1925 in the Soviet Union (although two chapters had been previously published in the late 1800's), and yet despite its late appearance, it is considered one of the most important Marxian texts produced during the 19th century. What is of particular interest in assessing the development of the scientific study of psychic ability in the USSR in the post-WW II era, is Chapter Three of the *Dialectics of Nature* entitled 'Natural Science in the Spirit World'. This is an assessment by Engels of how dialectical materialism (which had always been the bedrock of progressive science in the 19th century and before) was being misused by certain individuals as a means to justify the belief in the 'spiritual', 'telepathic' and 'religious' realms.

JK: Let's turn next to the Russian revolutionary, Leon Trotsky, whose views on this subject are not well known, but were representative of Marxist thinking at the time.

**Trotsky, Leon** *Dialectical Materialism and Science* (17 September 1927)

<https://www.marxists.org/archive/trotsky/1925/09/science.htm>

It can be said: The greater the trust of socialism in sciences devoted to direct study of nature, all the greater is its critical distrust in approaching those sciences and pseudo-sciences which are linked closely to the structure of human society, its economic institutions, its state, laws, ethics, etc. Of course these two spheres are not separated by an impenetrable wall. But at the same time, it is an indisputable fact that the heritage embodied in those sciences which deal not with human society but with "matter" – in natural sciences in the broad sense of the term, and consequently of course in chemistry – is of incomparably greater weight.

...Natural science – and chemistry occupies a most important place in that field – indisputably constitutes the most valuable portion of our inheritance. Your Congress stands under the banner of Mendeleev who was and remains the pride of Russian science.

...We have long found it unnecessary to resort to a more mysterious substance, called phlogiston, to explain chemical reactions. As a matter of fact, phlogiston served merely as a generalization for the ignorance of alchemists. In the sphere of physiology, the time has long since passed when a need was felt for a special mystical substance, called the vital force and which was the phlogiston of living matter. *In principle* we now possess sufficient knowledge of physics and chemistry to explain physiological phenomena. In the sphere of the phenomena of consciousness we are no longer in need of a substance labelled the soul which in reactionary philosophy performs the role of the phlogiston of psycho-physical phenomena. Psychology is for us in the *final analysis* reducible to physiology, and the latter – to chemistry, mechanics and physics.

"The cause of chemical reaction lies in the physical and mechanical properties of compounds." This formula of Mendeleev is completely materialist in character. Chemistry instead of resorting to some new super-mechanical and super-physical force to explain its phenomena, reduces chemical processes to the mechanical and physical properties of its compounds.

Biology and physiology stand in a similar relationship to chemistry. Scientific, that is, materialist physiology does not require a special super-chemical vital force (as is the claim of Vitalists and neo-Vitalists) to explain phenomena in its field. Physiological processes are reducible in the last analysis to chemical ones, just as the latter – to mechanics and physics.

Naturally, this does not mean to say that every phenomenon of chemistry can be reduced *directly* to mechanics; and even less so, that every social phenomenon is directly reducible to physiology and then – to laws of chemistry and mechanics. It may be said that this is the uppermost aim of science. But the method of gradual and continuous approach toward this aim is entirely different. Chemistry has its special approach to matter; its own methods of research, its own laws. If without the knowledge that chemical reactions are reducible *in the final analysis* to mechanical properties of elementary particles of matter, there is not and cannot be a finished philosophy linking all phenomena into a single system, so, on the other hand, the mere knowledge that chemical phenomena are themselves rooted in mechanics and physics does not provide in itself the key to even one chemical reaction. Chemistry has *its own keys*. One can choose among them only from experience and generalization, through the chemical laboratory, chemical hypothesis and chemical theory.

...Each science rests on the laws of other sciences only in the so-called final instance. But at the same time, the separation of the sciences from one another is determined precisely by the fact that each science covers a particular field of phenomena, i.e. a field of such complex combinations of elementary phenomena and laws as require a special approach, special research technique, special hypotheses and methods.

...In my opinion there is nothing paradoxical in the statement that from the sensations of a lizard one could, if it were possible to bring them into proper focus, draw much more direct conclusions concerning the structure and function of its organs than concerning the structure of society and its dynamics from such ideological reflections as, for example, religious creeds which once occupied and still continue to occupy so prominent a place in the life of human society; or from the contradictory and hypocritical codexes of official morality; or, finally, the idealistic philosophic conceptions which in order to explain complex organic processes occurring in man, seek to place responsibility upon a nebulous, subtle essence called the soul and endowed with the qualities of impenetrability and eternity.

...Darwin although unenlightened in philosophy, brilliantly applied Hegel's law of transition from quantity into quality. At the same time we very often discover in this same Darwin, not to mention the Darwinians, utterly naive and unscientific attempts at applying the conclusions of biology to society. To interpret competition as a "variety" of the biological struggle for existence is like seeing only mechanics in the physiology of mating.

...Mendeleyev more than once scornfully denounced dialectics. By this he understood not the dialectic of Hegel or Marx but the superficial art of toying with ideas, half sophistry, half scholasticism. Scientific dialectic embraces general methods of thought which reflect the laws of development. One of these laws is the change of quantity into quality. Chemistry is thoroughly permeated with this law. Mendeleyev's whole Periodic Law is built entirely on it, deducing qualitative difference in the elements from quantitative differences in atomic weights. Engels

evaluated the discovery of new elements by Mendeleev precisely from this viewpoint. In his sketch, *The General Character of Dialectics as a Science*, Engels wrote:

Mendeleev showed that in a series of related elements arranged according to their atomic weights there are several gaps which indicated the existence of other hitherto undiscovered elements. He described in advance the general chemical properties of each of these unknown elements and foretold approximately their relative and atomic weights, and their atomic place. Mendeleev, unconsciously applying Hegel's law of change of quantity into quality, accomplished a scientific feat which in its audaciousness can be placed alongside Leverrier's discovery of the yet unknown planet Neptune by computing its orbit.

...A dualism upon basic questions of knowledge is to be observed in Mendeleev. Thus it would seem that he tended toward agnosticism, declaring that the "essence" of matter must forever remain beyond our cognition because it is "alien to our knowledge and spirit" (!). But almost immediately he offers us a remarkable formula for knowledge which at a single stroke brushes agnosticism aside. In the very same note, Mendeleev says:

By accumulating gradually their knowledge of matter, men gain mastery over it, and to the degree in which they do so they make ever more precise predictions, verifiable factually and *there is no way of seeing how there can be a limit to man's knowledge and mastery of matter.*

It is self-evident that if there are no limits to knowledge and mastery of matter, then there is no unknowable "essence." Knowledge which arms us with the ability to forecast all possible changes in matter, and endows us with the necessary power of producing these changes – such knowledge does in fact exhaust the essence of matter. The so-called unknowable "essence" is only a generalization of our inadequate knowledge about matter. It is a pseudonym for our ignorance. Dualistic demarcation of unknown matter from its known properties reminds me of the jocular definition of a gold ring as a hole surrounded by precious metal. It is obvious that if we gain knowledge of the precious metal of phenomena and are able to shape it, then we can remain completely indifferent to the "hole" of the substance; and we gladly make a present of it to the archaic philosophers and theologians.

#### Major Miscalculations

Despite his verbal concessions to agnosticism ("unknowable essence") Mendeleev is unconsciously a dialectic materialist in his methods and his higher achievements in the sphere of natural science, especially, chemistry. But his materialism appears as though encased in a conservative shell, shielding its scientific thought from too sharp conflicts with official ideology.

...Permit me to cite another miscalculation. Not long before his death, Mendeleev wrote:

I especially fear for the quality of science and of all enlightenment, and general ethics under "State Socialism".

...Whenever any Marxist attempted to transmute the theory of Marx into a universal master-key and ignore all other spheres of learning, Vladimir Ilyich (Lenin) would rebuke him with the expressive phrase: “Komchvanstvo” (“Communist swagger”). This would mean in this particular case – Communism is not a substitute for chemistry. But the converse theorem is also true. An attempt to dismiss Marxism with the supposition that chemistry (or the natural sciences in general) is able to decide all questions is a peculiar “Chemist swagger” (Khimchvanstvo) which in point of theory is no less erroneous and in point of fact no less pretentious than Communist swagger.

JK: While the Soviets obtained outstanding scientific results in many fields under “State Socialism,” Mendeleev was an accurate forecaster of very serious problems of ethics (and survival) under that regime – which by the way some of us held was “state capitalism” of a particular kind, rather than “state socialism.”

**J. D. Bernal** was another prominent scientist who upheld dialectical materialism.

Wikipedia:

[https://en.wikipedia.org/wiki/J. D. Bernal](https://en.wikipedia.org/wiki/J._D._Bernal)

**John Desmond Bernal** was an Irish scientist who pioneered the use of [X-ray crystallography](#) in [molecular biology](#). He published extensively on the [history of science](#). In addition, Bernal was a political supporter of [communism](#) and wrote popular books on science and society. Supported Soviet Union through the 1950's or later. Admired Stalin. Defended Lysenkoism.

**Bernal, J.D.**, *Dialectical Materialism and Modern Science* (1937), *Science and Society, Volume II, No. 1, Winter 1937*.

<https://www.marxists.org/archive/bernal/works/1930s/dsams.htm>

[Some paragraphs have been broken up for easier reading]

Now Marxism is not scientific method, nor is it in any sense an alternative method; it is at the same time more comprehensive and more advanced. Both the method of science as hitherto understood and the content of scientific discovery can be incorporated in the Marxist scheme. They need, however, to be criticized and extended. Marxism is no substitute for science, but because of its wider scope it can see the limitations of existing methods and indicate where in the past these have been used in fields in which they have no competence. Further, it serves to complete the picture given by science by introducing into it a number of concepts and methods of working which have been, for historical and technical reasons, up till now foreign to it -- and lastly to show science that its social function is not only contemplative but active. This is not to be taken to mean that Marxism is not science or that it is something which could be added on to science; or to set up an antithesis between Marxism and science. Marxism transforms science and gives it greater scope and significance, but we are not concerned here so much with this transformed Marxist science as with science as it is today.

...The categories with which Marx dealt differ from those used in science in that they are incapable of complete isolation. They must always be considered in relation to their origin and to their future development.

Now as science itself has proceeded almost entirely by the method of isolation and precise definition of categories independent of time, the Marxist method of thinking has *appeared* loose and unscientific, or as most scientists would put it, metaphysical. Isolation in science however can only be achieved by a rigorous control of the circumstances of the experiment or application. Only when all the factors are known is scientific prediction, in the full sense, possible. Now it is quite clear that where new things are coming into the universe all the factors cannot be known, and therefore that the method of scientific isolation fails to deal with these new things. But from the human point of view it is as necessary to be able to deal with new things as with the regular order of nature. It is perfectly right to restrict the use of the scientific method as it exists to the latter, but it is wrong to imply that outside this regular order the human mind is helpless, that if something cannot be dealt with "scientifically" it cannot be dealt with rationally.

The great contribution of Marxism is to extend the possibility of the understanding and control of phenomena to include those in which radically new things are happening. This can only be done, however, subject to certain necessary limitations. In the first place, the degree of prediction where new things are concerned can never be of the same order of exactitude as in the regular and isolated operations of science. Exact knowledge which has been looked on as an ideal is however not the only alternative to no knowledge at all. There are, of course, very large regions inside science itself where exact knowledge is impossible. The whole trend of modern physics has shown that it is hopeless to expect it in atomic phenomena. But there the difficulty is circumvented by relying on the exactness of the statistical knowledge of a large number of events, and abandoning any claim to prediction of particular events. The exact dates and locality of the critical changes, the wars and revolutions that affect human society, are also unpredictable, and as there is only one human society even statistical methods are not strictly applicable. Nevertheless, the instability of certain economic and political systems can be shown to be due to intrinsic factors, and their breakdown becomes, within a wide limit of years, inevitable.

...The relevance of Marxism in the development of science is both theoretical and practical. It removes science from its imagined position of complete detachment and shows it as part, a critically important part, of economic and social development. The complete revolution of the history of science as the result of Marxist analysis, so brilliantly summarized in Professor Hogben's article in *SCIENCE & SOCIETY*, is one of the first results of this new attitude. But for Marxism understanding is inseparable from action, and the appreciation of the social position of science leads at once in a socialist country, such as the U.S.S.R., to the organic connection of scientific research with the development of socialized industry and human culture. The organization of science in capitalist countries has gradually molded itself in the service of big business, but because the process is not understood or appreciated its service is poor and incredibly wasteful. In any case production for profit can never develop the full potentialities of science except for destructive purposes. The Marxist understanding of science puts it in practice at the service of the community and at the same time makes science itself part of the cultural heritage of the whole people and not of an artificially selected minority.

The direct application of Marxism to scientific research is still very ill understood. It is clear that the scientific method as explicitly taught, while valid in establishing connections between phenomena, offers in itself no way of arriving at those connections. This fact is conveniently slurred over in scientific literature. In every scientific paper the data are given, the arguments from

the data to the conclusions, and the conclusions themselves. What is not given, in general, is how the investigator chose the problem and how he thought of deriving the conclusions, and when reasons are given they are very rarely those actually used in the research but rather the formalized version of what the procedure of an ideal rational man would be in the circumstances. The whole drive of scientific inquiry is left implicitly to be explained by the operations of genius or intuition. The scientist actually does think of the new things, and it is no one's business to inquire why he does. This is where dialectical materialism comes in. Its value is not merely critical, as is classical scientific method, but indicative. It points the way in which it may be useful to look for new solutions. It is able to do this because of its way of linking up different aspects of nature under its general categories.

It is extremely difficult to give examples because of the complexity of all the processes of scientific discovery, but from my own experience I have found Marxist methods invaluable for arriving at new conceptions. In the theory of liquids, for instance, we have to deal with phenomena that are not resolvable into the reaction of a particle with a certain environing force field but are strictly collective phenomena in which we have to consider at the same time the behavior of every particle and their mutual relations. It will be possible, when some systematic mind has been able to work on the subject, to develop out of the Marxist analysis a number of common scientific modes with some indication of which should be invoked in different circumstances. Collective behavior will obviously be one of these, another will be what might be called nuclear phenomena where the beginning of anything from the crystal to a revolution depends on a local assemblage of peculiarly favorable circumstances which alone enable it to get through the critical stages before which it is too small to grow.

Marxism has still another connection with science, that of criticizing its philosophic bases and the implications which seem to arise from the internal development of science itself. Marx, Engels and Lenin were all deeply concerned with this question, and for Marxist scientists of our time, though they have been distracted by the immediate needs of the economic situation in the Soviet Union or by the political situation outside it, it still remains a task of the greatest importance. On the fringe of science, and to the layman indistinguishable from it, are the pronouncements which the scientist makes on questions which are felt to be of vital human interest--those of the origin and fate of the universe, the nature of life, the character and behavior of the human mind and of society. In nearly every case the exact analysis of the statements reveals them as having little factual content, and in most cases they represent the dressing up of old traditional metaphysical ideas in the language, though not in the sense, of modern discovery. Such conceptions can be ruthlessly exposed and criticized from the Marxist point of view, because they represent entirely illegitimate use of science.

One particular method of argument which is extremely common nowadays is that which establishes the existence of the supernatural from our ignorance of the natural. It is just in those spheres of science where the least exact knowledge exists that the strongest attempts are made to use science to bolster up ancient superstitions. Fortunately, it is just in such places that Marxist methods of attack are most valid, because they are all places where new things are being produced and where isolation so common in scientific research most palpably breaks down. These were all questions to which Marx and Engels devoted particular attention, and the way in which they were able to anticipate the trends of discovery in these fields is a striking indication of the value of the

dialectical method. The modern Marxists have before them far vaster and more complex problems than had the pioneers. It seems probable that in the face of them modern science may well reach an impasse comparable with that which overcame the science of classical times. It is for the Marxists to find new methods of thought, of scientific organization and material technique which will prevent this happening.

The four critical points of the modern world view of science are the basic concepts of physics, which are now indissolubly bound up with the origin of the universe, the origin of life, the origin of human society and the fate of human civilization. In the first field it is more than ever clear that physics and astronomy are at present in an impasse. The contradictions between theory and observation in the field of cosmic rays, the expanding universe and the relation between fundamental physical units can no longer be obscured. Such contradictions are of course of enormous value to science, because out of the struggle to solve them will emerge some new and further-reaching generalizations, but until this happens no inferences can logically be made as to such ultimate questions; and even when it does, it can only be raising further and hitherto unglimped problems. Nevertheless, it is just this ignorance which is being used by the mystical physicists and astronomers to build a new creation myth. Just because the physicist cannot say, because the laws are not sufficiently well known, how the universe developed into its present state, they infer that it must have been created, as if this explanation did not raise enormously greater difficulties. From the Marxist point of view the problem of the origin of the universe in any ultimate sense is a pointless one. At any given stage the necessity of development of certain forms -- stars, galaxies -- may be derivable from the internal contradictions of some previous state, but there is no necessity to postulate either the eternal existence of a universe essentially like ours or a single ultimately primitive state. Indefinite regression of opposition and synthesis remains before us to explore.

**Bernal, J.D.,** *The world, the flesh and the Devil* (1929)

JK: Called brilliant science-fiction by Arthur C. Clarke.

<https://www.marxists.org/archive/bernal/works/1920s/soul/>

### I The Future

...Now the complex we are concerned with here is the human mind, and so we can fairly start with the assumption that the rest of the universe goes on its way determined by its physical, chemical and biological laws except in so far as man himself intervenes. Absolutely, we know hardly anything of these laws, but relatively to our knowledge of human behavior we know them so well that the future they present -- the astronomical, geological, biological future -- seems a fixed and stable thing...

### III The Flesh

A much more fundamental break is implicit in the means of his development. If a method has been found of connecting a nerve ending in a brain directly with an electrical reactor, then the way is open for connecting it with a brain-cell of another person. Such a connection being, of course, essentially electrical, could be effected just as well through the ether as along wires. At first this would limit itself to the more perfect and economic transference of thought which would be necessary in the co-operative thinking of the future. But it cannot stop here. Connections between two or more minds would tend to become a more and more permanent condition until they



functioned as a dual or multiple organism. The minds would always preserve a certain individuality, the network of cells inside a single brain being more dense than that existing between brains, each brain being chiefly occupied with its individual mental development and only communicating with the others for some common purpose. Once the more or less permanent compound brain came into existence two of the ineluctable limitations of present existence would be surmounted.

...It would be a state of ecstasy in the literal sense, and this is the second great alteration that the compound mind makes possible. Whatever the intensity of our feeling, however much we may strive to reach beyond ourselves or into another's mind, we are always barred by the limitations of our individuality. Here at least those barriers would be down: feeling would truly communicate itself, memories would be held in common, and yet in all this, identity and continuity of individual development would not be lost. It is possible, even probable, that the different individuals of a compound mind would not all have similar functions or even be of the same rank of importance. Division of labor would soon set in: to some minds might be delegated the task of ensuring the proper functioning of the others, some might specialize in sense reception and so on. Thus would grow up a hierarchy of minds that would be more truly a complex than a compound mind.

...Finally, consciousness itself may end or vanish in a humanity that has become completely etherealized, losing the close-knit organism, becoming masses of atoms in space communicating by radiation, and ultimately perhaps resolving itself entirely into light. That may be an end or a beginning, but from here it is out of sight.

[End Bernal]

JK: Remarkable speculations about mind now that artificial intelligence (AI) is roiling the world! Pandora's box has been opened. As an instance of this, and how far-out things are getting, "light beings" have been reported by several UFO experiencers. Beings made of light. Well, David Bohm did describe matter as "frozen light"!

<https://oisf.org/understanding-the-higgs-1-frozen-light-2/>

## **J.B.S. Haldane**

Wikipedia

[https://en.wikipedia.org/wiki/J.\\_B.\\_S.\\_Haldane](https://en.wikipedia.org/wiki/J._B._S._Haldane)

**John Burdon Sanderson Haldane.** 5 November 1892–1 December 1964 nicknamed "Jack" or "JBS", was a British-Indian scientist who worked in [physiology](#), [genetics](#), [evolutionary biology](#), and [mathematics](#). With innovative use of [statistics in biology](#), he was one of the founders of [neo-Darwinism](#). He served in the [Great War](#), and obtained the rank of captain. Despite his lack of an academic degree in the field, he taught biology at the [University of Cambridge](#), the [Royal Institution](#), and [University College London](#). Renouncing his British citizenship, he became an Indian citizen in 1961 and worked at the [Indian Statistical Institute](#) for the rest of his life.

**J.B.S. Haldane**, *The Marxist Philosophy and the Sciences* (1939)

JK: Haldane was a geneticist and a Marxist. He credited Marxism with aiding in work in the biological sciences. Haldane believed dialectics existed throughout nature, not only when human beings were involved. When he wrote the following, Haldane had been a Marxist for only a year. [“M.E.” refers to Lenin’s *Materialism and Empirio-Criticism*.]

Haldane:

THIS BOOK IS BASED UPON THE MUIRHEAD lectures on political philosophy delivered in the University of Birmingham in January and February 1938. I have expanded them to deal more fully with matters of detail. They are primarily addressed to scientific workers and students, in the belief that Marxism will prove valuable to them in their scientific work, as it has to me in my own. But in view of the general importance of the subject I hope to interest a somewhat wider audience.

I have tried to apply Marxism to the scientific problems of my own day, as Engels did over many years, and Lenin in 1908. I do not doubt that I have made mistakes. A Marxist must not be too afraid of making mistakes.

...Now, until 1917, it might have been possible to dismiss Marxism as the doctrine of a small set of cranks, no more important than the doctrines of Bakunin, Sorel, or other revolutionary theorists. This was particularly so in England, where Marxism was largely ignored both in academic and political circles, whereas on the continent of Europe it was at least considered worthy of criticism. You will remember, however, one of the definitions of a crank, covering both the human and mechanical kinds, as ‘A little thing that makes revolutions’!

...Now, what is Marxism? Plekhanov, a Russian Marxist and predecessor of Lenin, began his book, *Fundamental Problems of Marxism*, with the statement: “Marxism is a complete theoretical system.” That is approximately true of the philosophy of Aristotle, St. Thomas, Spinoza, or Hegel. Clearly it is not true of the philosophy of Socrates. It is also untrue of Marxism. Marxism is not complete, not a system, and only in the second place theoretical. It is not complete because it is alive and growing, and above all because it lays no claim to finality. The most that a Marxist can say for Marxism is that it is the best and truest philosophy that could have been produced under the social conditions of the mid-nineteenth century. It is not primarily a system, but a method. As Marx said in the Eleventh Thesis on Feuerbach: “The philosophers have only interpreted the world in various ways: the point is to change it.” Like Descartes, he regarded his philosophy as primarily a method, and although theory is essential in Marxism, Marx proclaimed the primacy of practice over theory.

...Now a student of academic philosophy who takes up a study of Marxism will at first be disappointed. A great many questions are left unanswered, for two different reasons. Some were shown to be improperly put, and it was sufficient to demonstrate the historical reasons why they had been asked in the past. Others could not be answered on the existing data. Thus the relation between brain and mind is not in principle an insoluble problem; but it cannot be solved, except in the most summary manner, until we know a very great deal more, particularly about the brain. Marxism is not concerned mainly with being, but with becoming.

## Some Marxist Principles

...In the first place, we have the principle of the unity of theory and practice, with the primacy of practice.

A second Marxist principle is materialism. This word has been used in a very large number of senses, and it is important to realize just what Marx meant by the term. Engels wrote as follows:

The answers which the philosophers gave to this question [the relation of thinking to being] split them into two great camps. Those who asserted the primacy of spirit to nature and, therefore, in the last instance, assumed world creation in some form or another — (and among the philosophers, Hegel, for example, this creation often becomes still more intricate and impossible than in Christianity) — comprised the camp of idealism. The others, who regarded nature as primary, belong to the various schools of materialism.

These two expressions, idealism and materialism, primarily signify nothing more than this; and here also they are not used in any other sense.

...Now that definition of materialism is not accepted by many people. For example, my late father, J. S. Haldane, *Materialism*, p. 5. (London, 1932) wrote as follows:

Materialism may be defined as the belief that physico-chemical realism, or the assumption that the representation of our surrounding universe by the physical sciences in their traditional form corresponds to reality, can be extended so as to cover, not only the phenomena of life, but also those of conscious behaviour.

If we compare this with what Lenin wrote, we shall see that J. S. Haldane's view, so far at least as it is expressed in that passage, is not in conflict with Marxism. Lenin's words are:

It is, of course, totally absurd that materialism should maintain the 'lesser' reality of consciousness or should necessarily adhere to a 'mechanistic world-picture' of matter in motion and not an electro-magnetic, or even some immeasurably more complicated one. [M.E., p. 238]

Again, in another place, Lenin wrote:

For the sole 'property' of matter — with the recognition of which materialism is vitally concerned — is the property of being objective reality, of existing outside of our cognition. ... The recognition of immutable elements, 'of the immutable substance of things,' is not materialism, but is metaphysical, anti-dialectical materialism. [M.E., p. 220]

...What are these dialectical principles? One of them is the principle of the unity of opposites. For example, if I say, "John Smith is a man," I am asserting the identity in a certain context of a particular, John Smith, and the universal, man. This identity has led philosophers into very great difficulties for the last 2,300 years. Again, I say that the wood of which this table is made is hard,

or it would not support things, and soft, or it could not be cut. Two opposite qualities are united. Before such assertions, we have two alternatives; we may say, as Plato said, that matter is something self-contradictory, it is and is not. Universals are real, but matter is unreal.

Or we may say with Engels that matter unites these opposites. This means that matter is some thing very much richer and more complicated than the mechanistic materialists had ever dreamed.

Two remarks may be made on this principle. Lenin wrote that the unity of opposites is something conditional and temporary. Gas has no hardness, in the sense that it will put up no permanent resistance to division. On the other hand, it is probable that an electron is absolutely hard in the sense of being completely indivisible.

...For example, electrons have apparently at the same time properties which compel us to regard them as particles, and other properties which can be explained if they are systems of waves. Two thousand years from now, these difficulties may seem very elementary indeed, but I think that our descendants will probably still be finding opposites embodied in matter which they will find difficult to unify.

The second principle is the passage of quantity into quality, and conversely. This phrase is taken from Hegel, but a much more satisfactory account of what is meant by it is given by Marx in *Capital*.

Here, as in natural science, is verified the correctness of the law discovered by Hegel in his 'logic' that merely quantitative changes beyond a certain point pass into qualitative differences.

A classical example of this is the boiling or freezing of water, but any other change of phase in physical chemistry may be taken as an example. At the boiling point of water some of its measurable qualities show an abrupt break. The volume, which has been going up steadily but slowly, shoots up enormously. Other properties disappear; for example, the capacity for dissolving solutes and that of ionizing salts.

The principle is, of course, absolutely fundamental in physiology. A hundred years ago it was commonly said that carbon dioxide was a poison, because a man died if he breathed pure carbon dioxide. Then J. S. Haldane found that a certain amount of this substance was essential for life. The normal amount in the blood corresponds to a pressure of about 5 per cent of an atmosphere. If this is either doubled or halved serious symptoms arise. In fact, too much of it is a poison, but a certain amount is a necessity.

...Now according to the view of matter which was first clearly formulated by Locke, though it goes back to Descartes and Democritus, the quantitative aspect of matter is real, whilst of its qualities [sic] are illusory. Thus what we call colours and tones are "really" only vibration frequencies. For Marxists both quantity and quality are properties of the real world.

The converse transformation of quality into quantity is exemplified when a symphony is recorded on a sound-track. Since our knowledge of the external world depends on the frequencies with

which nervous impulses reach our brains and spinal columns along a million or two nerve fibres, and not on qualitative differences in these impulses, this transformation, and the reverse transformation of quantity into quality which takes place in our brains, play a fundamental part in our knowledge of the world.

...A third principle, which is perhaps the most important, is what is called the negation of the negation. Let me give a simple example. I learn to drive a motor-car, and among other things to steer it. Then I drive a little faster than usual, and skid. Skidding is the negation of steering. After skidding a number of times, I learn to control a skid in the direction which I desire. That is a passage to a higher level of motor driving. It is a passage which some drivers never make. London bus drivers, who have to learn to drive in pools of oil, are compelled to make it, and the controlled skid is part of the technique of every racing motorist. I take that example from familiar practice. Examples in physics and biology will follow later on.

...Now the negation of the negation was regarded by Marx as the main source of progress and of novelty. A great many philosophers, for example, Lloyd Morgan and Smuts, have recently been interested in what they call the emergence of novelty.

Lenin wrote:

Two fundamental (or is it the two possible? or is it the two historically observed?) conceptions of evolution are: development as decrease and increase as repetition; and development as a unity of opposites (the division of the one into mutually exclusive opposites and their reciprocal correlation). The first conception is dead, poor, and dry; the second is vital. It is only this second conception which offers the key to understanding the 'self-movement' of everything in existence; it alone offers the key to understanding 'leaps,' to the 'interruption of gradual succession,' to the 'transformation into the opposite,' to the destruction of the old and the appearance of the new. [M.E., p. 323 (manuscript notes)]

We shall have to see how far this rather ambitious claim can be verified in the field of science.

Above all, dialectical materialism insists on the reality of change. It claims to go back beyond Plato and Socrates to Heraclitus, and in particular it welcomed the new developments of physics which seemed to some to spell the end of materialism, and which undoubtedly were the end of the very narrow forms of materialism current in many scientific circles at the end of the nineteenth century, and still current in some of them.

As we saw above, Lenin wrote: [M.E., p. 220]

"The sole 'property' of matter — with the recognition of which materialism is vitally connected — is the property of being objective reality, of existing outside our cognition."

And for that reason, he was very far from upset by the revolutionary physical discoveries of his time.

...In the Middle Ages, no self-respecting alchemist would have dreamed of doing any chemical process which was in any way difficult without first observing the position of the planets. For example, if it was an operation involving tin, he would presumably have seen that the experiment was begun when Jupiter was in the ascendant, because Jupiter was the planet presiding over tin. One of the greatest steps in chemical progress ever taken was when some bold man actually began making experiments without first observing the planets, and found that they were just as successful as before.

...Before we pass on, I want to compare this Hegelian-Marxist dialectic for one moment with that of Socrates, who may be said to have introduced the dialectical method into philosophy.

So far as we can make out, the Socratic method of operation was as follows: he started a conversation with some unfortunate Athenian citizen on a topic such as the nature of justice, and made his unlucky and unsuspecting interlocutor contradict himself. As a result of those contradictions, he arrived, if not at the truth, at any rate somewhat nearer the truth than his starting-point.

...If then we can divide up all animals precisely into different species, between which the distinctions are at all times well marked, no doubt the Russell-Whitehead theory of classification will hold. But actually this division of animals into species or other higher categories is by no means universally valid. The gap between species is bridged not only by evolution in the past, but in some cases at any rate, by hybridization in the present. Engels made very great play with animals which bridged gaps — *Archaeopteryx*, which bridged the gap between reptiles and birds, and *Ceratodus*, bridging to some extent the gap between the fish and the amphibia, though, of course, far less completely than many fossil forms since discovered. For that reason it is probable that too great emphasis has been attached to logical systems which will only work for material that has certain highly abstract properties, which are rather less frequently and much less completely exemplified in the real world than logicians would like to think.

[End Haldane]

## Turning to Richard Levins and Richard Lewontin

[https://en.wikipedia.org/wiki/Richard\\_Levins](https://en.wikipedia.org/wiki/Richard_Levins)

**Richard Levins** (June 1, 1930– January 19, 2016) was a Marxist biologist, a population geneticist, biomathematician, [mathematical ecologist](#), and [philosopher of science](#) who researched [diversity](#) in human populations. Until his death, Levins was a university professor at the [Harvard T.H. Chan School of Public Health](#) and a long-time [political activist](#). He was best known for his work on [evolution](#) and complexity in changing [environments](#) and on [metapopulations](#).

Levins also had written on philosophical issues in [biology](#) and [modelling](#). One of his influential articles is "The Strategy of Model Building in Population Biology". He has influenced a number of contemporary [philosophers](#) of biology. Levins often boasted publicly that he was a 'fourth generation [Marxist](#)' and often had said that the methodology in his *Evolution in Changing Environments* was based upon the introduction to [Marx's \*Grundrisse\*](#), the author's notes (not

published until 1939) for *Das Kapital*. With the evolutionary geneticist [Richard Lewontin](#), Levins had written a number of articles on methodology, philosophy, and social implications of biology. Many of these are collected in *The Dialectical Biologist*. In 2007, the duo published a second thematic collection of essays titled *Biology Under the Influence: Dialectical Essays on Ecology, Agriculture, and Health*.

Also with [Lewontin](#), Levins had co-authored a number of satirical articles criticizing [sociobiology](#), [systems modeling](#) in [ecology](#), and other topics under the [pseudonym Isadore Nabi](#). Levins and [Lewontin](#) managed to place a ridiculous biography of Nabi and his achievements in *American Men of Science*, thereby showing how little editorial care and [fact-checking](#) work went on in that respected reference work.

[https://en.wikipedia.org/wiki/Richard\\_Lewontin](https://en.wikipedia.org/wiki/Richard_Lewontin)

**Richard Charles Lewontin** (March 29, 1929–July 4, 202) was an American [evolutionary biologist](#), mathematician, [geneticist](#), and [social commentator](#). A leader in developing the [mathematical](#) basis of [population genetics](#) and evolutionary theory, he applied techniques from [molecular biology](#), such as [gel electrophoresis](#), to questions of [genetic variation](#) and evolution.

In a pair of seminal 1966 papers co-authored with [J. L. Hubby](#) in the journal *Genetics*, Lewontin helped set the stage for the modern field of [molecular evolution](#). In 1979, he and [Stephen Jay Gould](#) introduced the term "[spandrel](#)" into [evolutionary theory](#). From 1973 to 1998, he held an endowed chair in zoology and biology at Harvard University, and from 2003 until his death in 2021 he was a research professor there.

From a sociological perspective, Lewontin strongly opposed [genetic determinism](#) and neodarwinism as expressed in the fields of sociobiology and evolutionary psychology. Previously, as a member of *Science for the People*, he denounced the involvement of prominent scientists in Pentagon programs aimed at developing weapons for the Vietnam War. From the 1990s, he condemned the lobbying of [GMOs](#) by the "genetic-industrial complex".

**Richard Levins and Richard Lewontin, *The Dialectical Biologist, Conclusion: Dialectics* (1985)**

p282 (in pdf) We too have our own intellectual preconceptions. If we differ from most scientists, it is in our deliberate attempt to make these preconceptions explicit where we can. The earlier chapters in this book were written largely from a Marxist perspective. They reflect the conflict between the materialist dialectics of our conscious commitment and the mechanistic, reductionist, and positivist ideology that dominated our academic education and that pervades our intellectual environment. We have now here, however, attempted to define the dialectical method or set forth its principles in an explicit list. These chapters were not based on some clearly enumerated list of "dialectical principles." Rather, they reflect certain habits of thought, certain forms of questioning that we identify as dialectical. Nevertheless, it seems necessary, in order to pursue the intellectual program of this collection, to attempt some explicit discussion of this way of thinking.

Formalizations of the dialectic have a way of seeming rigid and dogmatic in a way that contradicts the fluidity and historicity of the Marxist world view. This is especially the case when it is set out

as "laws," by analogy with the laws of natural science. Yet most scientific laws establish quantitative relations among variables and serve as a basis for prediction. The "laws" of dialectics are clearly not analogous to, say, Einstein's equation  $E = mc^2$  but rather are analogous to prior principles, the constancy of the speed of light in all inertial frames, and the conservation of momentum. Perhaps the principles of dialectics are analogous to Darwin's principles of variation, heritability, and selection in that they create the terms of reference from which quantifications and predictions may be derived.

A second reason for our reluctance to formulate the dialectic in terms of laws is that it creates the illusion that dialectics are rules derived simply from nature. They are not. A dialectical view of dialectics would emphasize that the principles and vocabulary taken over from philosophers have been transformed and invoked polemically in opposition to, as a negation of, the prevailing ideological framework of bourgeois science, the Cartesian reductionist perspective. The value of the dialectic is as a conscious challenge to the major sources of error of the present, and our own description of dialectical principles is specifically designed to help solve the problems we work with in both our scientific and our political lives.

283 Ideas of cause and effect, subject and object, part and whole form an intellectual frame that delimits our construction of reality, although we are barely aware of its existence or, if we are, we affirm it as a self-evident reality that must constrain all thought. We do not and cannot begin at square one every time we think about the world. Knowledge is socially constructed because our minds are socially constructed and because individual thought only becomes *knowledge* by a process of being accepted into social currency. So dominant ideologies set the tone for the theoretical investigation of phenomena, which then becomes a reinforcing practice for the ideology itself.

284 The dominant mode of analysis of the physical and biological world and by extension the social world, as the social "sciences" have come into being, has been Cartesian reductionism. This Cartesian mode is characterized by four ontological commitments, which then put their stamp on the process of creating knowledge:

1. There is a natural set of units or parts of which any whole system is made.
2. These units are homogeneous within themselves, at least insofar as they affect the whole of which they are the parts.
3. The parts are ontologically prior to the whole; that is, the parts exist in isolation and come together to make wholes. The parts have intrinsic properties, which they possess in isolation and which they lend to the whole. In the simplest cases the whole is nothing but the sum of its parts; more complex cases allow for interactions of the parts to produce added properties of the whole.
4. Causes are separate from effects, causes being the properties of subjects, and effects the properties of objects. While causes may respond to information coming from the effects (so-called "feedback loops"), there is no ambiguity about which is causing subject and which is caused object (This distinction persists in statistics as independent and dependent variables.)



We characterize the world described by these principles as the *alienated* world, the world in which parts are separated from wholes and reified as things in themselves, causes separated from effects, subjects separated from objects. It is a physical world that mirrors the structure of the alienated social world in which it was conceived. Beginning with the first glimmerings of merchant entrepreneurship in thirteenth-century Europe, and culminating in the bourgeois revolutions of the seventeenth and eighteenth centuries, social relations have emphasized the primacy of the alienated individual as a social actor. By successive acts of enclosure; land was alienated from the peasant cultivators, who formerly were tied to it and it to them. Individuals became social atoms, colliding in the market, each with his or her special interests and properties intrinsic to their roles. No individual person, however, is confined to a single role in bourgeois society. The same people are both consumers and producers, owners and renters, bosses and bossed. Yet bourgeois social theory sees society as constructed of homogeneous interest groups. "Consumers" have their interest, "labor" its interest, "capital" its interest, the whole of society taking a shape determined by the action of these categories on each other.

285 Workers as individuals do sell their labor power in a market whose terms have been made by struggles between workers and employers generally. Consumers do have an interest in the commodities offered them that is antithetical to the interest of the producers. But these interest groups have been created by the very system of social relations of which they are said to be the basis.

In like manner, the alienated physical world is not only a structure of knowledge, but a physical structure imposed on the world. Which one of a chain of intersecting causes becomes *the* cause of a given effect is determined in part by social practice. For example, medical research and practice isolate particular causes of disease and treat them. The tubercle bacillus became the cause of tuberculosis, as opposed to, say, unregulated industrial capitalism, because the bacillus was made the point of medical attack on the disease. The alternative would be not a "medical" but a "political" approach to tuberculosis and so not the business of medicine in an alienated social structure. Having identified the bacillus as the cause, a chemotherapy had to be developed to treat it, rather than, say, a social revolution.

286 No way of thinking about the world of phenomena can provide a total description of the infinitely complex set of interacting causes of all events. It is our contention that the alienated world view captures a particularly impoverished shadow of the actual relations among phenomena in the world, concerning itself only with the projections of multidimensional objects on fixed planes of low dimensionality. Indeed, it is an explicit *objective* of Cartesian reductionism to find a very small set of independent causal pathways or "factors" that can be used to reconstruct a large domain of phenomena. An elementary exercise in design courses is to make an object that is circular in one projection square in a second projection and triangular in the third. (*We leave the solution as an exercise for the reader.*)

287 In contrast, in the dialectical world view, things are assumed from the beginning to be internally heterogeneous at every level. And this heterogeneity does not mean that the object or system is composed of fixed natural units. Rather, the "correct" division of the whole into parts varies, depending upon the particular aspect of the whole that is in question. In evolutionary reconstructions the problem is to identify the anatomical, behavioral, or physiological units of

evolution. Is the hand a unit in evolution, or is it the entire forelimb or, on the contrary, is each finger or each joint of each finger the appropriate unit? The answer depends upon the way genes interact with each other to influence the development of the hand and the way in which natural selection operates. But gene interactions themselves evolve, and the nature of the force of natural selection varies from time to time and species to species, so the hand may be a unit of evolution at some times but not others. Moreover, the degree of functional integration or independence of fingers, hand, and forelimb will itself evolve; a unit of evolution may, by its very evolution, annihilate itself as a unit of future evolution. It is a matter of simple logic that parts can be parts only when there is a whole for them to be parts of. Part implies whole, and whole implies part. Yet reductionist practice ignores this relationship, isolating parts as preexisting units of which wholes are then composed. In the dialectical world the logical dialectical relation between part and whole is taken seriously. Part makes whole, and whole makes part.

288 The first principle of a dialectical view, then, is that a whole is a relation of heterogeneous parts that have no prior independent existence *as parts*. The second principle, which flows from the first, is that, in general, the properties of parts have no prior alienated existence but are acquired by being parts of a particular whole. In the alienated world the intrinsic properties of the alienated parts confer properties on the whole, which may in addition take on new properties that are not characteristic of the parts: the whole may be more than the sum of its parts. But the ancient debate on emergence, whether indeed wholes may have properties not intrinsic to the parts, is beside the point. The fact is that the parts have properties that are characteristic of them only as they are parts of wholes; the properties come into existence in the interaction that makes the whole. A person cannot fly by flapping her arms, no *matter* how much she tries, nor can a group of people fly by all flapping their arms simultaneously. But people do fly, as a consequence of the social organization that has created airplanes, pilots, and fuel. It is not society that flies, however, but individuals in society, who have acquired a property they do not have outside society. The limitations of individual physical beings are negated by social interactions. The whole, thus, is not simply the object of interaction of the parts but is the subject of action on the parts.

...A third dialectical principle, then, is that the interpenetration of parts and wholes is a consequence of the interchangeability of subject and object, of cause and effect. In the alienated world objects are the passive, caused elements of other active, causal subjects. In evolutionary theory organisms are usually seen as the objects of evolution: through natural selection, autonomous changes in the environment cause adaptive alterations in the passive organism. As we argued in Chapter 3, however, the actual situation is quite different. Organisms are both the subjects and the objects of evolution. They both make and are made by the environment and are thus actors in their own evolutionary history.

The separation between cause and effect, subject and object in the alienated world has a direct political consequence, summed up in the expression, "You can't fight city hall." The external world sets the conditions to which we must adapt ourselves socially, just as environment forces the species to adapt biologically. The ideology of "being realistic" manifests itself in theories of human psychic development, such as Piaget's (1967) claim that "equilibrium is attained when the adolescent understands that the proper function of reflection is not to contradict but to predict and interpret experience." To this we counterpose Marx's (1845) eleventh thesis on Feuerbach: "The philosophers have only interpreted the world in various ways; the point, however, is to change it."

Two other schools of thought also recognize the heterogeneity of the world, but in different ways. Liberals are fond of urging that situations "are not all black or white," that *each* course of action has its advantages and disadvantages, costs and benefits. Their solution is to see the world as shades of gray, to weigh costs and benefits on some scale that comes with a single resultant—net profit or loss—or to insist that, given two extremes, "The truth lies somewhere in between." In each *case* the differences are quantitative, and contradictions are resolved by compromise.

The Taoist tradition in China shares with dialectics the emphasis on wholeness, the whole being maintained by the balance of opposites such as yin and yang. Although balanced, yin and yang do not lose their identities in some puddled intermediate. Chinese medicine recognizes excess of yin and deficiency of yang as distinct pathologies. However, balance is seen as the natural, desirable state, and the goal of intervention is to restore balance. Therefore Taoist holism is a doctrine of harmony rather than development.

Because elements recreate each other by interacting and are recreated by the wholes of which they are parts, change is a characteristic of all systems and all aspects of all systems. That is a fourth dialectical principle.

290 In bourgeois thought change is often seen as the regular unfolding of what is already there (in principle in the genes, if not physically pre-formed); it is described by listing the sequence of *results* of change, the necessary stages of social or individual development. This shift from process to product also contaminates socialist thought when the dynamic view of history as a history of class struggle is replaced by the grand march of stages, from primitive communism through slavery, feudalism, capitalism, socialism, and on into the glorious sunset. Thus even where deep change cannot be ignored, it is acknowledged reluctantly and denied with the world-weary aphorism, "The more things change, the more they are the same." In the alienated world there are constants and variables, those things that are fixed and those that change as a consequence of fixed laws operating with fixed parameter values.

In the dialectical world, since all elements (being both subject and object) are changing, constants and variables are not distinct classes of values. The time scales of change of different elements may be very different, so that one element has the appearance of being a fixed parameter for the other. For example, the formulations of population genetics take the environment as constant for long periods in order to calculate the trajectories of gene frequencies and their equilibria. But as the environment changes slowly, the equilibria themselves may be changing more slowly. Reciprocally, population ecology assumes that species are not changing genetically in order to calculate the demographic trajectories of age classes, although the equilibrium will slowly change as the genotypic composition of populations changes. Finally, community ecology takes both the demographic and genetic properties of species as constants in order to predict the equilibrium of species numbers in a community, although these may slowly change as genetic changes occur in an evolutionary time scale.

291 There are, of course, physical constants like the mass of the electron, the speed of light, and Planck's constant, which we regard as fixed and insensitive to the systems of which they are a part. Yet their constancy is not a law derived from yet other, more primitive principles, but an

assumption. We do not, in fact, *know* that "the" mass of "the" electron has been the same since the beginning of matter nor, even if it has been so constant, that its value is not an accident of the history of matter. Whether such values are indeed changing and, if they are, at what rate, is a contingent question, not to be answered from principle. The difference between the reductionist and the dialectician is that the former regards constancy as the normal condition, to be proven otherwise, while the latter expects change but accepts apparent constancy.

Not only do parameters change in response to changes in the system of which they are a part, but the laws of transformation themselves change. In the alienated world view, entities may change as a consequence of developmental forces, but the forces themselves remain constant or change autonomously as a result of intrinsic developmental properties. In fact, however, the entities that are the objects of laws of transformation become subjects that change these laws. Systems destroy the conditions that brought them about in the first place and create the possibilities of new transformations that did not previously exist.

293 The assertion that all objects are internally heterogeneous leads us in two directions. The first is the claim that there is no basement. This is not an a priori imposition on nature but a generalization from experience: all previously proposed undecomposable "basic units" have so far turned out to be decomposable, and the decomposition has opened up new domains for investigation and practice. Therefore the proposition that there is no basement has proven to be a better guide to understanding the world than its opposite. Furthermore, the assertion that there is no basement argues for the legitimacy of investigating each level of organization without having to search for fundamental units.

A second consequence of the heterogeneity of all objects is that it directs us toward the explanation of change in terms of the opposing processes united within that object. Heterogeneity is not merely diversity: the parts or processes confront each other as opposites, conditional on the whole of which they are parts. For example, in the predator-prey system of lemmings and owls, the two species are opposite poles of the process, predation simultaneously determining the death rate of lemmings and the birth rate of owls. It is not that lemmings are the opposite of owls in some ontological sense, or that lemmings imply owls or couldn't exist without owls. But within the context of this particular ecosystem, their interaction helps to drive the population dynamics, which shows a spectacular fluctuation of numbers.

What characterizes the dialectical world, in all its aspects, as we have described it is that it is constantly in motion. Constants become variables, causes become effects, and systems develop, destroying the conditions that gave rise to them. Even elements that appear to be stable are in a dynamic equilibrium of forces that can suddenly become unbalanced, as when a dull gray lump of metal of a critical size becomes a fireball brighter than a thousand suns. Yet the motion is not unconstrained and uniform. Organisms develop and differentiate, then die and disintegrate. Species arise but inevitably become extinct. Even in the simple physical world we know of no uniform motion. Even the earth rotating on its axis has slowed down in geologic time. The development of systems through time, then, seems to be the consequence of opposing forces and opposing motions.

This appearance of opposing forces has given rise to the most debated and difficult, yet the most central, concept in dialectical thought, the principle of contradiction. For some, contradiction is an epistemic principle only. It describes how we come to understand the world by a history of antithetical theories that, in contradiction to each other and in contradiction to observed phenomena, lead to a new view of nature. Kuhn's (1962) theory of scientific revolution has some of this flavor of continual contradiction and resolution, giving way to new contradiction. For others, contradiction is not only epistemic but political as well, the contradiction between classes being the motive power of history. Thus contradiction becomes an ontological property at least of human social existence. For us, contradiction is not only epistemic and political, but ontological in the broadest sense. Contradictions between forces are everywhere in nature, not only in human social institutions.

This tradition of dialectics goes back to Engels (1880) who wrote, in *Dialectics of Nature*, that "to me there could be no question of building the laws of dialectics of nature, but of discovering them in it and evolving them from it." Engels's understanding of the physical world was, of course, a nineteenth-century understanding, and much of what he wrote about it seems quaint. Moreover, dialecticians have repeatedly attempted to make the identification of contradictions in nature a central feature of science, as if all scientific problems are solved when the contradictions have been revealed. Yet neither Engels' factual errors nor the rigidity of idealist dialectics changes the fact that opposing forces lie at the base of the evolving physical and biological world.

Things change because of the actions of opposing forces on them, and things are the way they are because of the temporary balance of opposing forces. In the early days of biology an inertial view prevailed: nerve cells were at rest until stimulated by other nerve cells and ultimately by sensory excitation. Genes acted if the raw materials for their activity were present; otherwise they were quiescent. Gene frequencies in a population remained static in the absence of selection, mutation, random drift, or immigration. Nature was at equilibrium unless perturbed. Later it was recognized that nerve impulses act both to excite and to inhibit the firing of other nerves, so the state of a system depends on the network of opposing stimuli, and that network can generate spontaneous activity. Gene action is regulated by repressors, repressors of the repressors, and all sorts of active feedbacks in the cell. There are no genetic loci immune to mutation and random drift, and no populations are free of selection.

The dialectical view insists that persistence and equilibrium are not the natural state of things but require explanation, which must be sought in the actions of the opposing forces. The conditions under which the opposing forces balance and the system as a whole is in stable equilibrium are quite special. They require the simultaneous satisfaction of as many mathematical relations as there are variables in the system, usually expressed as inequalities among the parameters of that system.

295 The opposing forces are seen as contradictory in the sense that each taken separately would have opposite effects, and their joint action may be different from the result of either acting alone. So far, the object may seem to be the passive victim of these opposing forces. However, the principle that all things are internally heterogeneous directs our attention to the opposing processes at work *within* the object. These opposing processes can now be seen as part of the self-regulation and development of the object. The relations among the stabilizing and destabilizing processes

become themselves the objects of interest, and the original object is seen as a system, a network of positive and negative feedbacks.

296 Real systems include pathways for both positive and negative feedback. Negative feedbacks are a prerequisite for stability: the persistence of a system requires self-negating pathways. But negative feedback is no guarantee of stability and under some circumstances can throw the system into oscillation.

...We see contradiction first of all as self-negation. From this perspective it is not too different from logical contradiction. In formal logic process is usually replaced by static set-structural relations, and the dynamic of "A leads to B" is replaced by "A implies B." But all real reasoning takes place in time, and the classical logical paradoxes can be seen as A leads to not-A leads to A, and so on. For instance, consider Russell's paradoxical barber who shaves any and all men who do not shave themselves. If we assume that the barber shaves himself, then he belongs to the set of those he does not shave. Therefore, he is eligible to be a shaver by himself, and so we go round and round, as each affirmation is in turn negated. (Logicians would exclude the feminist solution that the barber is a woman and does not shave herself.) Material and logical contradiction share the property of being self-negating processes.

297 The dialectical viewpoint sees dynamical stability as a rather special situation that must *be* accounted for. Systems of any complexity -- the central nervous system, the national and world capitalist economies, ecosystems, the physiological networks of organisms -- are more likely to be dynamically unstable. Even systems designed explicitly to be stable, such as nuclear power plants, have shown a remarkable propensity to behave in unplanned ways.

The important point here is that complex systems show spontaneous activity. Each of these systems responds to events from outside, but it is not necessary to look to external sources for the causes of movement. The capitalist business cycle does not depend on sunspots. Political "unrest" is not explained by outside agitators. Changing abundance of species is not evidence of human impact on the environment. And it is becoming increasingly apparent that the prevention of change in wildlife management, environmental protection, or society is, in the long run, an impossible goal.

Self-negation is not simply an abstract possibility derived from arguments about the universality of change. We observe it regularly in nature and society. Monopoly arises not as a result of the thwarting of "free enterprise" but as a consequence of its success: hence the futility of antitrust legislation. The freeing of serfs from feudal ties to the land also meant the possibility of their eviction from the land; freedom of the press has increasingly meant the freedom of the owners of the press to control information. The self-negating processes of capitalism are often expressed as ironic commentaries, as the realization of ideal goals turns out to thwart their original intent. Sometimes this self-negation is the consequence of quantitative changes that cross a threshold. For instance, at one time the Polish government established a policy of subsidizing the price of bread at a fixed level in order to guarantee the basic food supply. As inflation developed, the gap between the subsidized price of bread and the prices of other goods widened until one morning Warsaw was without bread: farmers had discovered that it was cheaper to buy bread to feed their livestock than to grow feed: the very mechanisms designed to guarantee the urban bread supply were turned into their opposite.

A second aspect of contradiction is the interpenetration of seemingly mutually exclusive categories. A necessary step in theoretical work is to make distinctions. But whenever we divide something into mutually exclusive and jointly all-encompassing categories, it turns out on further examination that these opposites interpenetrate. In Chapter 3 we examined the interpenetration of organism and environment. Here we note briefly several more examples.

At first glance, "deterministic" and "random" processes seem to exemplify mutually exclusive categories. Many trees have been sacrificed to the cause of printing debates about whether the world, or species aggregates, or evolution, is deterministic or random. (The deterministic side implying order and regularity, the stochastic side implying absence of system or explanation). In the first place, however, completely deterministic processes can generate apparently random processes.

...Second, random processes may have deterministic results. This is the basis for predictions about the number of traffic accidents or for actuarial tables. A random process results in some frequency distribution of outcomes. The frequency distribution itself is determined by some parameters, and changes in these parameters have completely determined effects on the distribution. Thus the distribution as an object of study is deterministic even though it is the product of random events.

Third, near thresholds separating domains of very different qualitative behaviors, a small displacement can have a big effect. If these small displacements arise from lower levels of organization, they will be unpredictable from the perspective of the higher level. And in general the intrusion of events from one level to another appears as randomness.

Finally, the interaction of random and deterministic processes gives results in evolution that are different from the consequence of either type of process acting alone.

299 Contradiction also means the coexistence of opposing principles (rather than processes) which, taken together, have very different implications or consequences than they would have if taken separately. Commodities embody the contradiction between use value and exchange value (reflected indirectly in price).

301 The principles of materialist dialectics that we attempt to apply to scientific activity have implications for research strategy and educational policy as well as methodological prescriptions:

*Historicity.* Each problem has its history in two senses: the history of the object of study (the vegetation of North America, the colonial economy, the range of *Drosophila pseudoobscura*) and the history of scientific thinking about the problem, a history dictated not by nature but by the ways in which our societies act on and think about nature. Once we recognize that state of the art as a social product, we are freer to look critically at the agenda of our science, its conceptual framework, and accepted methodologies, and to make conscious research choices. The history of our science must include also its philosophical orientation, which is usually only implicit in the practice of scientists and wears the disguise of common sense or scientific method.

It is sure to be pointed out that the dialectical approach is no less contingent historically and socially than the viewpoints we criticize, and that the dialectic must itself be analyzed dialectically. This is no embarrassment; rather, it is a necessary awareness for self-criticism. The preoccupation with process and change comes in part from our commitment to change society. An alertness to the fallacies of gradualism derives from a challenge to liberalism. An insistence on seeing tilings (sic) as integrated wholes reflects a belief that much of the suffering, waste, and destruction in the world today comes from the operation of patriarchal capitalism as a world system penetrating all corners of our lives rather than from a list of separable and isolatable defects. And the emphasis on the 'social interpretation of science comes from a political commitment to struggle for an alternative way of relating to nature and knowledge that is congruent with an alternative way of organizing society. One practical consequence of this view point is that the study of the history, sociology, and philosophy of science is a necessary part of science education.

*Universal interconnection.* As against the alienated world view that objects are isolated until proven otherwise, for us the simplest assumption is that things are connected. The ignoring of interconnections, especially across disciplinary boundaries, has been the main source of error and even disaster in complex fields of applied biology such as public health, agriculture, environmental protection, and resource management and the cause of the stagnation of theory in these areas. Therefore we urge that an early stage of any investigation should be to trace out the indirect, speculative, and even far-fetched connections among phenomena of interest and to justify any ignored connections.

*Heterogeneity.* The internal heterogeneity of all things and all populations of things is the complementary perspective to *universal* connections: different things combine into greater, heterogeneous wholes. This perspective leads us to focus on quantitative and qualitative variability as objects of interest and sources of explanation. Then certain problems become especially appealing, such as the organization of phenotypic variability in plants and animals, the differentiation of classes in society, the recognition that plants which bear the same species name can be quite different to the herbivores that eat them, or that the same species may have different ecological significance in different places. When faced with an ensemble of things of any sort, we are suspicious of any apparent homogeneity.

*Interpenetration of opposites.* The more we see distinctions in nature, and the more we subdivide and set up disjunct classes, the greater the danger of reifying these differences. Therefore, complementary to any process of subdividing is the hypothesis that there is no nontrivial and complete subdivision, that opposites interpenetrate and that this interpenetration is often critical to the behavior of the system.

*Integrative levels.* As against the reductionist view, which sees wholes as reducible to collections of fundamental parts, we see the various levels of organization as partly autonomous and reciprocally interacting. We must reject the molecular euphoria that has led many universities to shift biology to the study of the smallest units, dismissing population, organismic, evolutionary, and ecological studies as forms of "stamp collecting" and allowing museum collections to be neglected. But once the legitimacy of these studies is recognized, we also urge the study of the vertical relations among levels, which operate in both directions.



We do not know whether or not these elements of a research and educational program will in fact result in solutions to long-standing problems of biology. Dialectical philosophers have thus far only explained science. The problem, however, is to change it.

[End Lewontin and Levins]

## Further sources

**Carneiro, Robert L.** *The transition from quantity to quality: A neglected causal mechanism in accounting for social evolution*, American Museum of Natural History, New York, September 28, 2000

Carneiro:

If a certain dislocation of the normal workings of a society does not exceed a certain point, the ordinary operation of the existing institutions of that society eventually will restore it to its former state, with no permanent change in its structure having occurred. But if the disturbance is of sufficient magnitude, the social system will no longer be able to return to its previous condition, but will be permanently modified, as the society seeks new ways to accommodate itself to its drastically altered circumstances.

This principle can be seen in operation by comparing two depressions in American economic history. The depression of 1922 was moderate in strength and short in duration. Its effects were ephemeral and were overcome by the normal functioning of market forces. No extraordinary legislative initiatives were required. Thus, after the depression of 1922 was over, the American economic system remained essentially unchanged.

However, the depression that began with the stock market crash of 1929 was of a vastly different order. Its magnitude was both profound and prolonged. And when it finally became obvious that normal market forces were insufficient to reestablish the previous equilibrium, a series of legislative measures were enacted creating new structural features designed to restore the national economy—indeed the whole society—to a semblance of its former self. The New Deal legislation of the 1930s established such new entities as the Reconstruction Finance Corporation, the Agricultural Adjustment Administration, the Securities and Exchange Commission, the Federal Deposit Insurance Corporation, the National Labor Relations Board, Unemployment Insurance, the Public Works Administration, and the Social Security Administration.

To put the matter in more general terms, the depression of the 1930s was so severe that it exceeded the elastic limits of the existing American society. The quantitative changes in the economy were so great that they called for and engendered qualitative changes of a permanent sort. By contrast, the depression of 1922 was so moderate that it did not exceed the elastic limits of the society, and thus failed to produce any significant or enduring changes in the socio-economic system.

In summary, the notion of a build-up of quantitative changes until they reach a certain magnitude, at which point they give rise to qualitative changes, has repeatedly proved of value in accounting for structural changes in human societies. Surprisingly, in explaining the mechanisms underlying social evolution, the small group of anthropologists for whom this principle is part of their Marxist heritage have made virtually no use of it. But then again neither have those non-Marxist

anthropologists who are likewise interested in exploring how societies evolve. Yet, shorn of its political associations, the principle of quantitative changes leading to qualitative changes stands as a sound and powerful tool in the armamentarium of evolutionary interpretations. In the relatively few applications it has thus far received it has shed great light on important social changes. Put to work on a larger scale, it holds the promise of yielding even greater results in our quest to understand how societies evolve.

**Richard Clarke**, *What can a Marxist approach tell us about science?*

<https://www.culturematters.org.uk/index.php/culture/science/item/2676-what-can-a-marxist-approach-tell-us-about-science27> November 2017

Clarke:

‘Science’ and ‘scientific’ can mean at least three different things, including: 1) the ‘knowledge content’ of different disciplines (as in physics, chemistry, biology) about the universe; 2) the processes by which this understanding is acquired (the ‘scientific method’ and wider issues in the philosophy of science); and 3) the relationship of science to society, in particular the organisation, funding and control of research (in the laboratories of universities, by pharma companies or within the ‘military-industrial complex’) and how access to and use of that knowledge is controlled.

All three of these are connected, and it’s easiest to take them in reverse order.

Science is often conceived as ‘pure’ knowledge or ‘facts’, independent of the way these are produced, controlled or used. Marxists would challenge this, pointing out that throughout history, the changing content of scientific knowledge -- what are understood at any point in time as facts - - are closely related to the social conditions of their production, though in a dialectical rather than a deterministic way. Marx, writing to Engels about Darwin’s theory of evolution by natural selection commented: “It is remarkable how among beasts and plants Darwin recognises his English society with its division of labour, competition, opening up of new markets, ‘inventions’ and Malthusian ‘struggle for existence.’” (Letter from Marx to Engels, June 18, 1862)

In 1931 a Soviet delegation arrived unannounced at the second International Congress of the History of Science in London, where its leader, Boris Hessen delivered a paper entitled *The Socio-Economic Roots of Newton's Principia*. Hessen argued that Isaac Newton’s *Philosophiæ Naturalis Principia Mathematica* (first published in 1687) -- perhaps the single most important scientific treatise of western civilization -- was intimately connected to the social conditions of its production. Newton’s Laws of Motion and his ‘discovery’ of gravity were not a gift of divine providence, not (just) the product of individual genius (or the consequence of being hit by a falling apple). They were a response to specific technical problems of early capitalism, in particular the need for improved maritime navigation, the development of new machinery and ballistic weaponry in warfare.

That scientific theories are related to the social context of their production does not of course mean that they are ‘wrong’ or lacking in objectivity. But it challenges the conventional view of science and scientists as autonomous, having an impact ‘on’ society but not being influenced by society. In reality the relationship is two-way; it is dialectical. This approach - emphasising the reciprocal links between science and its social context was later popularised by the communist scientist J D

Bernal in his four-volume *Science in History*, and it is now broadly accepted by the majority of historians of science.

Under capitalism, ‘natural science acts as a direct productive force, continuously invading and transforming all areas of human existence.’ It is one of the principal agents of technological and social change. It can be immensely liberating, but also hugely destructive. From the mid-twentieth century onwards, ‘the twin roles of science as a force of production and of social control have become both dominant and manifest, and [...] this transition is linked with a change in the mode of production of scientific knowledge, from essentially craft, to industrialised production.’ (Hilary Rose and Steven Rose, *The Incorporation of Science*, in *The Political Economy of Science*.)

Science can be exciting. It is one of the things that separates humans from all other animals. But the mode of production of scientific knowledge has changed since Marx’s day, from essentially craft, to industrialised assembly. Today the daily work of most scientists is routine. Most scientific research is conducted by or funded by commercial organisations. The overwhelming majority of scientists are employees, working (often under short-term contracts) under the direction of their managers on specific problems which are part of a greater whole of which they are often unaware -- a situation analogous to the Taylorism of factory work (maximising efficiency by breaking jobs down into simple routine elements) and funded either by external grants or directly by the companies for which they work.

Scientific labour (the work of practising scientists) itself produces ‘use value’ as knowledge, much of which, through patenting or commercial secrecy, is appropriated for profit. The activities of pharmaceutical companies, agricultural research and the nuclear industry all demonstrate the subordination of science to capital, often in particularly oppressive and (socially and environmentally) destructive ways.

And capital makes profit from science not only through its technological applications (from foodstuffs and pharmaceuticals to energy technologies and software systems) but also in other, essentially unproductive ways, from restrictive patents to publishing. In 2010, Elsevier’s scientific publishing arm reported profits of £724m on just over £2bn in turnover – a 36% margin, higher than Apple, Google, or Amazon posted that year. The careers of scientists depend on publishing in ‘reputable’ journals which charge extortionate prices for access.

Marxism also has something to say about the philosophy and methodology of science. Marx and Engels both emphasised the way that science itself moves in a dialectical way from induction to deduction, from analysis to synthesis and from the concrete to the abstract, and back again. For example, induction involves making a generalisation from a set of specific observations. This results in the formulation of an hypothesis (an explanation or prediction) which, if not contradicted by further observation, becomes incorporated in a body of theory. Deduction works the other way around -- start with a generalisation (a theory), produce an hypothesis about what will happen in a particular situation, then test this through further observations, sometimes involving experiments. The two processes of induction and deduction are inseparable and lead to a progressive refinement of theory as the best explanation, generally supported by the scientific community, of observations to date.

One of the most influential philosophers of science was (Sir) Karl Popper. Popper emphasised that a ‘scientific’ statement (or theory) is not one that is necessarily ‘true’, but rather one that is framed in such a way that it can be tested (or falsified). For Popper, an anti-communist liberal, Marxism is not ‘scientific’ because it is not falsifiable. However the same criticism also applies to most of the social sciences and indeed to much natural science. Darwinism (the theory of evolution through natural selection) is itself primarily inductive.

A rather different view of scientific progress was popularised by the philosopher Thomas Kuhn. In his extraordinarily influential *The Structure of Scientific Revolutions* Kuhn argued against the Popperian notion of science as a gradual orderly progression towards ‘truth’. Most scientists, most of the time, he argued, operate within an unchallenged conceptual framework, or paradigm, filling in bits of a jigsaw or ‘puzzle-solving’ but rarely challenging the overall picture. Periodically, however, anomalies accumulate, ‘normal science’ breaks down and a new paradigm emerges. Examples of such ‘paradigm shifts’ include the Copernican revolution (a heliocentric rather than an earth-centred universe), Darwinian evolution, and Einsteinian relativity theory. Kuhn emphasised that paradigm shifts are not confined to the internal logic of science but involve social and political factors as well.

Kuhn’s work resulted in a surge of interest on the social relations of science — including the rediscovery of Hesse’s paper on Newton a third of a century earlier and of which Kuhn appears to have been unaware. It also chimed with the ‘anti-science swing’ of the 1970s, leading some to argue that science was ‘nothing but’ social relations. Both extremes -- the view of science as ‘pure’ knowledge independent of society, but also the argument that science is merely another form of ideology or culture -- have always been challenged by Marxists. The questions science asks (and the answers that it gets) are closely related to the way that science is organised, who pays and who profits, as well as to the more general needs of society. But that doesn’t mean that science is necessarily lacking in objectivity (although sometimes this is the case). Scientific knowledge is a special form of knowledge. The scientific method and the knowledge it produces have a relative autonomy.

But a Marxist approach can take us still further in relation to ‘the facts’ of science. The underlying philosophical basis of Marxism, dialectical materialism, is not a magic key to provide the ‘right’ solution to any problem. There have been periods in the not-too-distant history of science where it has been abused, notably during the ‘Lysenko period’ of Soviet genetics. It is, rather, a potentially helpful approach to asking the right questions (and to examining and challenging answers which are put forward by others) – about nature as well as about human society.

The dominant mode of science is reductionist – studying individual parts of a system, isolating one variable at a time and ignoring other aspects. Reductionism is potentially a powerful procedure in science. But of itself it can only provide partial answers to relatively limited questions. Reductionism alone can never provide the whole picture. And in some areas, notably in human biology and psychology, it lends itself to (unintentional or deliberate) abuse. An example is when supposedly ‘scientific’ justifications are put forward for social inequality, discrimination and the status-quo.

This was particularly the case with what came to be known as social Darwinism, pioneered by Herbert Spencer, one of the most influential European intellectuals of the late 19th century, who coined the phrase 'survival of the fittest' (never used by Darwin himself) and applied it to human affairs. A free market was the reflection in human society of natural law. Regulation and welfare provision, he argued, should therefore be opposed (he used the phrase 'There Is No Alternative' more than a century before Thatcher). Ironically, Spencer's ashes are interred in Highgate cemetery opposite Karl Marx's grave.

Science has been used repeatedly since in a similar way. Today sociobiology and evolutionary psychology are still used to justify inequality, racism and sexual discrimination on the basis of supposed inherited biological traits. Competition, aggression, xenophobia are (it is argued) programmed into us from our ancestral past. They are 'in our genes'. The notion of the 'selfish gene' is an example of a reductionist approach which 'naturalises' what are essentially social phenomena and fails to look at the relations between different levels of analysis. Sometimes the biases in science are unconscious. Sometimes they are deliberate. Sir Cyril Burt was a hugely influential educational psychologist who 'proved' that intelligence was overwhelmingly inherited. His work was used to justify selective schooling and the subordination of black and working class people. His work was always challenged by progressives but it was only after his death in 1971 that it was found to have been fraudulent.

Good science (and major advance) needs to look critically at the evidence for any explanation of phenomena, and also to understand the limits within which those explanations are appropriate. It needs to examine the functions of each part of a complex system but also the interactions between these parts and the way they affect the behaviour of a system as a whole. A dialectical approach in science is valuable both in what Thomas Kuhn called 'normal science' but also in the major transformative shifts which change the way that we perceive the world. Many Marxist scientists have found such an approach helpful in their professional work.

An example in the physical sciences is the quantum physicist David Bohm, one of the most significant theoretical physicists of the 20th century. Following his early work on nuclear fission Bohm collaborated with Albert Einstein at Princeton University before being forced to leave the United States because of his links with the Young Communist League and activity in peace movements. At London's Birkbeck College he showed how entities -- from sub-atomic particles to everyday 'objects' -- can be regarded as 'semi-autonomous quasi-local features' of underlying processes, later extending this to the nature of thought and consciousness.

Other notable Marxist physicists include the crystallographer and polymath J D Bernal (also based at Birkbeck), Dorothy Hodgkin (pioneer of three dimensional protein structures such as penicillin and insulin) and the biochemist Joseph Needham (the first Head of the Natural Sciences Section of UNESCO). Perhaps unsurprisingly the most productive applications of a dialectical approach have been in biological science. One of the most prominent was J B S Haldane (originator with the Russian biochemist Aleksandr Oparin of the 'primordial soup' theory of the origin of life) who combined his scientific work with popularisation of science and Marxist philosophy. And other scientists (including some who would disclaim the descriptor 'Marxist') nevertheless see dialectical materialism as a key guide in their science. An example is Ernst Mayr, one of the most

eminent biologists of the 20th century, whose 1977 essay *Roots of Dialectical Materialism* is a good brief introduction to the subject and its controversies.

More recent conspicuous examples of Marxist scientists include Steven Rose in his work on the relationship between consciousness and the human brain, the evolutionary palaeontologist Stephen Jay Gould (author with Niles Eldredge of the theory of punctuated equilibrium), the ecologist Richard Levins (a pioneer of metapopulation theory) and the geneticist Dick Lewontin.

So: a Marxist approach can reveal a good deal about the relation of science to society, and it can also help to illuminate the process whereby scientific knowledge is produced. As far as the knowledge content of science is concerned, Marxism of itself offers no especially privileged insights into the workings of nature - that is the job of science and scientists. But a dialectical methodology is an essential complement to reductionism. And in key areas it can help us question the popular presentation of 'facts' which might otherwise be taken on trust. A socialist science has the potential to be a better kind of science.

[End Clarke]

**Campbell, Ben**, *Dialectics in Science: An interview with Helena Sheehan* (Posted on December 15, 2012)

The author of *Marxism and the Philosophy of Science* says the tendency of some on the left to counterpose a humanistic Marx to a positivist Engels weakens Marxism, and is not supported by historical evidence.

<https://climateandcapitalism.com/2012/12/15/dialectics-in-science-an-interview-with-helena-sheehan/>

### Collections

[https://www.marxists.org/reference/subject/philosophy/front\\_pg.htm#physics](https://www.marxists.org/reference/subject/philosophy/front_pg.htm#physics)

Vast collection of documents. Has links to articles on epistemology and modern physics, Marxist orthodoxy, Western Marxism, Recent Marxism.

<https://www.marxists.org/subject/science/index.htm>

Marxism and natural science. Marxism and Soviet Science.

**Sheehan, Helena**, *Marxism and the Philosophy of Science: A Critical History* (1985, 1993, 2017)  
Sheehan:

There have always been those who synthesized these two streams. Most familiar to me is the 1930s British Marxism of Bernal, Haldane, Caudwell, and others, and post-war Eastern European Marxism. Regarding the latter, it suffered from the orthodoxy of parties in power, but it wasn't all catechetical dogmatism. In the United States, Richard Levins and Richard Lewontin. This would still characterize my own position today.

**Sheehan**, *Marxism and Science Studies: A Sweep Through the Decades* (2007):

Marxism has made the strongest claims of any intellectual tradition before or since about the socio-historical character of science, yet always affirmed its cognitive achievements. Science was seen as inextricably enmeshed with economic systems, technological developments, political

movements, philosophical theories, cultural trends, ethical norms, ideological positions, indeed all that was human. It was also a path of access to the natural world.

**Wallis, Victor**, *Richard Levins and Dialectical Thinking* (2015-2017)

JK: On the law of identity. An appreciation of Levins. But for Wallis dialectics is about thinking, it's not inherent in nature.

**Woods, Alan and Grant, Ted**, *Reason in Revolt, Dialectical Philosophy and Modern Science* (1995)

JK: Useful if one wants more perspectives on the many topics they cover, from a broad and somewhat loose understanding of what dialectics is.

Woods and Grant:

And it is not only Lenin's use of middle class materialism in defence of 'Marxism' which indicates the half-bourgeois, half-proletarian character of bolshevism and of the Russian Revolution itself.

JK: reminiscent of Tom Clark's unpublished book, *The State and Counter-Revolution*. Clark was the leading person in the Communist Workers Group, based in Lawrence, Kansas. The CWG was an ultra-Left collective which posted a much circulated map of the entire anti-Revisionist Left in the United States in the mid-1970s. That Left soon declined and in this later work Clark bemoaned the failure of the workers to flock to the revolutionary banner. He concluded that the entire enterprise failed because it was of petty-bourgeois origin, including Lenin and before him Marx and Engels as well.

Continuing Woods and Grant:

Einstein formulated the transformation of mass into energy and now the term, *matter*, when it is used, includes all the physical phenomena of which men are aware. Experimental methods were devised which recorded the effects of atoms and of the elemental particles of which they are composed. These elemental particles may be considered the ultimate units of matter — "precisely those units into which matter decomposes under the impact of external forces. This state of affairs can be summed up thus: all elemental particles are made of the same stuff — namely, energy... Matter exists because energy assumes the form of the elemental particles.

[End Woods and Grant]

## Chapter 5 Marxists on Materialism and Idealism

This chapter explores the materialism/idealism debate with a focus on Marxist views. Extracts are from Engels, Marx, Plekhanov, Lenin, Bukharin and Mao.

Chapter 7 addresses some of the same issues from mainstream perspectives and includes additional material on consciousness. Chapter 10 presents the challenge that psi and remote viewing pose for materialism.

In the simplest terms, materialists assert that there is a world which exists independent of humans. There is an “objective reality” wholly apart from human beings. The sun and moon existed long before humans did, and they still do, whether humans look at them or not. Idealists assert that consciousness or a form of spirit is fundamental and that matter is derivative.

Let’s start with what the founders of Marxism, Marx and Engels, had to say.

### Friedrich Engels

**Engels, *Ludwig Feuerbach and the End of Classical German Philosophy* (1886)**

<https://www.marxists.org/archive/marx/works/1886/ludwig-feuerbach/ch02.htm#:~:text=The%20great%20basic%20question%20of,relation%20of%20thinking%20and%20being>

#### Part 2: Materialism

The great basic question of all philosophy, especially of more recent philosophy, is that concerning the relation of thinking and being. From the very early times when men, still completely ignorant of the structure of their own bodies, under the stimulus of dream apparitions came to believe that their thinking and sensation were not activities of their bodies, but of a distinct soul which inhabits the body and leaves it at death — from this time men have been driven to reflect about the relation between this soul and the outside world. If, upon death, it took leave of the body and lived on, there was no occasion to invent yet another distinct death for it. Thus arose the idea of immortality, which at that stage of development appeared not at all as a consolation but as a fate against which it was no use fighting, and often enough, as among the Greeks, as a positive misfortune. The quandary arising from the common universal ignorance of what to do with this soul, once its existence had been accepted, after the death of the body, and not religious desire for consolation, led in a general way to the tedious notion of personal immortality. In an exactly similar manner, the first gods arose through the personification of natural forces. And these gods in the further development of religions assumed more and more extramundane form, until finally by a process of abstraction, I might almost say of distillation, occurring naturally in the course of man’s intellectual development, out of the many more or less limited and mutually limiting gods there arose in the minds of men the idea of the one exclusive God of the monotheistic religions.

Thus the question of the relation of thinking to being, the relation of the spirit to nature — the paramount question of the whole of philosophy — has, no less than all religion, its roots in the narrow-minded and ignorant notions of savagery. But this question could for the first time be put forward in its whole acuteness, could achieve its full significance, only after humanity in Europe



had awakened from the long hibernation of the Christian Middle Ages. The question of the position of thinking in relation to being, a question which, by the way, had played a great part also in the scholasticism of the Middle Ages, the question: which is primary, spirit or nature — that question, in relation to the church, was sharpened into this: Did God create the world or has the world been in existence eternally?

The answers which the philosophers gave to this question split them into two great camps. Those who asserted the primacy of spirit to nature and, therefore, in the last instance, assumed world creation in some form or other — and among the philosophers, Hegel, for example, this creation often becomes still more intricate and impossible than in Christianity — comprised the camp of idealism. The others, who regarded nature as primary, belong to the various schools of materialism.

These two expressions, idealism and materialism, originally signify nothing else but this; and here too they are not used in any other sense. What confusion arises when some other meaning is put to them will be seen below.

But the question of the relation of thinking and being had yet another side: in what relation do our thoughts about the world surrounding us stand to this world itself? Is our thinking capable of the cognition of the real world? Are we able in our ideas and notions of the real world to produce a correct reflection of reality? In philosophical language this question is called the question of identity of thinking and being, and the overwhelming majority of philosophers give an affirmative answer to this question. With Hegel, for example, its affirmation is self-evident; for what we cognize in the real world is precisely its thought-content — that which makes the world a gradual realization of the absolute idea, which absolute idea has existed somewhere from eternity, independent of the world and before the world. But it is manifest without further proof that thought can know a content which is from the outset a thought-content. It is equally manifest that what is to be proved here is already tacitly contained in the premises. But that in no way prevents Hegel from drawing the further conclusion from his proof of the identity of thinking and being that his philosophy, because it is correct for his thinking, is therefore the only correct one, and that the identity of thinking and being must prove its validity by mankind immediately translating his philosophy from theory into practice and transforming the whole world according to Hegelian principles. This is an illusion which he shares with well-nigh all philosophers.

#### Part 4 Marx

The great basic thought that the world is not to be comprehended as a complex of readymade *things*, but as a complex of *processes*, in which the things apparently stable no less than their mind images in our heads, the concepts, go through an uninterrupted change of coming into being and passing away, in which, in spite of all seeming accidentally and of all temporary retrogression, a progressive development asserts itself in the end — this great fundamental thought has, especially since the time of Hegel, so thoroughly permeated ordinary consciousness that in this generality it is now scarcely ever contradicted. But to acknowledge this fundamental thought in words and to apply it in reality in detail to each domain of investigation are two different things. If, however, investigation always proceeds from this standpoint, the demand for final solutions and eternal truths ceases once for all; one is always conscious of the necessary limitation of all acquired knowledge, of the fact that it is conditioned by the circumstances in which it was acquired. On the other hand, one no longer permits oneself to be imposed upon by the antithesis, insuperable for the

still common old metaphysics, between true and false, good and bad, identical and different, necessary and accidental. One knows that these antitheses have only a relative validity; that that which is recognized now as true has also its latent false side which will later manifest itself, just as that which is now regarded as false has also its true side by virtue of which it could previously be regarded as true. One knows that what is maintained to be necessary is composed of sheer accidents and that the so-called accidental is the form behind which necessity hides itself — and so on.

**Friedrich Engels**, *Dialectics of Nature. Notes and Fragments* (1883)

<https://www.marxists.org/archive/marx/works/1883/don/ch07c.htm>

It is the old story. First of all one makes sensuous things into abstractions and then one wants to know them through, the senses, to see time and smell space. The empiricist becomes so steeped in the habit of empirical experience, that he believes that he is still in the field of sensuous experience when he is operating with abstractions. We know what an hour is, or a metre, but not what time and space are! As if time was anything other than just hours, and space anything but just cubic metres! The two forms of existence of matter are naturally nothing without matter, empty concepts, abstractions which exist only in our minds. But, of course, we are supposed not to know what matter and motion are! Of course not, for matter as such and motion as such have not yet been seen or otherwise experienced by anyone, only the various existing material things and forms of motions. Matter is nothing but the totality of material things from which this concept is abstracted and motion as such nothing but the totality of all sensuously perceptible forms of motion; words like matter and motion are nothing but *abbreviations* in which we comprehend many different sensuous perceptible things according to their common properties. Hence matter and motion can be known in no other way than by investigation of the separate material things and forms of motion, and by knowing these, we also *pro tanto* [done or existing to a given extent] know matter and motion as such. Consequently, in saying that we do not know what time, space, matter, motion, cause and effect are, Nägeli [Swiss-German botanist Carl Wilhelm von Naegeli (1817-1891)] merely says that first of all we make abstractions of the real world through our minds, and then cannot know these self-made abstractions because they are creations of thought and not sensuous objects, while all knowing is *sensuous measurement*! This is just like the difficulty mentioned by Hegel; we can eat cherries and plums, but not *fruit*, because no one has so far eaten fruit as such.

**Karl Marx**

**Marx**, *A Contribution to the Critique of Political Economy* (1859)

<https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/preface.htm>

In the social production of their existence, men indirectly produce their social life... The mode of production of material life conditions the general character of the social, political and spiritual process of life. It is not the consciousness of men that determines their existence, but conversely their social existence that determines their consciousness.

**Marx**, *The German Ideology* (written in 1846).

<https://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm>

[Not published during the lifetimes of Marx and Engels]

The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourse of men, the language of real life. Conceiving, thinking, the mental intercourse of men, appear at this stage as the direct efflux of their material behaviour. The same applies to mental production as expressed in the language of politics, laws, morality, religion, metaphysics, etc., of a people. Men are the producers of their conceptions, ideas, etc. – real, active men, as they are conditioned by a definite development of their productive forces and of the intercourse corresponding to these, up to its furthest forms. Consciousness can never be anything else than conscious existence, and the existence of men is their actual life-process. If in all ideology men and their circumstances appear upside-down as in a *camera obscura*, this phenomenon arises just as much from their historical life-process as the inversion of objects on the retina does from their physical life-process.

In direct contrast to German philosophy which descends from heaven to earth, here we ascend from earth to heaven. That is to say, we do not set out from what men say, imagine, conceive, nor from men as narrated, thought of, imagined, conceived, in order to arrive at men in the flesh. We set out from real, active men, and on the basis of their real life-process we demonstrate the development of the ideological reflexes and echoes of this life-process. The phantoms formed in the human brain are also, necessarily, sublimates of their material life-process, which is empirically verifiable and bound to material premises. Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life. In the first method of approach the starting-point is consciousness taken as the living individual; in the second method, which conforms to real life, it is the real living individuals themselves, and consciousness is considered solely as their consciousness.

This method of approach is not devoid of premises. It starts out from the real premises and does not abandon them for a moment. Its premises are men, not in any fantastic isolation and rigidity, but in their actual, empirically perceptible process of development under definite conditions. As soon as this active life-process is described, history ceases to be a collection of dead facts as it is with the empiricists (themselves still abstract), or an imagined activity of imagined subjects, as with the idealists.

Where speculation ends – in real life – there real, positive science begins: the representation of the practical activity, of the practical process of development of men. Empty talk about consciousness ceases, and real knowledge has to take its place. When reality is depicted, philosophy as an independent branch of knowledge loses its medium of existence. At the best its place can only be taken by a summing-up of the most general results, abstractions which arise from the observation of the historical development of men. Viewed apart from real history, these abstractions have in themselves no value whatsoever. They can only serve to facilitate the arrangement of historical material, to indicate the sequence of its separate strata. But they by no means afford a recipe or schema, as does philosophy, for neatly trimming the epochs of history. On the contrary, our difficulties begin only when we set about the observation and the arrangement – the real depiction – of our historical material, whether of a past epoch or of the present. The removal of these difficulties is governed by premises which it is quite impossible to state here, but which only the

study of the actual life-process and the activity of the individuals of each epoch will make evident. We shall select here some of these abstractions, which we use in contradistinction to the ideologists, and shall illustrate them by historical examples.

## 1. PRECONDITIONS OF THE REAL LIBERATION OF MAN

Division of labour only becomes truly such from the moment when a division of material and mental labour appears. (The first form of ideologists, priests, is concurrent.) From this moment onwards consciousness can really flatter itself that it is something other than consciousness of existing practice, that it really represents something without representing something real; from now on consciousness is in a position to emancipate itself from the world and to proceed to the formation of “pure” theory, theology, philosophy, ethics, etc. But even if this theory, theology, philosophy, ethics, etc. comes into contradiction with the existing relations, this can only occur because existing social relations have come into contradiction with existing forces of production; this, moreover, can also occur in a particular national sphere of relations through the appearance of the contradiction, not within the national orbit, but between this national consciousness and the practice of other nations, i.e. between the national and the general consciousness of a nation (as we see it now in Germany).

### Part I: Feuerbach. Opposition of the Materialist and Idealist Outlook

#### B. The Illusion of the Epoch

#### 7. Summary of the Materialist Conception of History

This conception of history depends on our ability to expound the real process of production, starting out from the material production of life itself, and to comprehend the form of intercourse connected with this and created by this mode of production (i.e. civil society in its various stages), as the basis of all history; and to show it in its action as State, to explain all the different theoretical products and forms of consciousness, religion, philosophy, ethics, etc. etc. and trace their origins and growth from that basis; by which means, of course, the whole thing can be depicted in its totality (and therefore, too, the reciprocal action of these various sides on one another). It has not, like the idealistic view of history, in every period to look for a category, but remains constantly on the real ground of history; it does not explain practice from the idea but explains the formation of ideas from material practice; and accordingly it comes to the conclusion that all forms and products of consciousness cannot be dissolved by mental criticism, by resolution into “self-consciousness” or transformation into “apparitions,” “spectres,” “fancies,” etc. but only by the practical overthrow of the actual social relations which gave rise to this idealistic humbug; that not criticism but revolution is the driving force of history, also of religion, of philosophy and all other types of theory. It shows that history does not end by being resolved into “self-consciousness as spirit of the spirit,” but that in it at each stage there is found a material result: a sum of productive forces, an historically created relation of individuals to nature and to one another, which is handed down to each generation from its predecessor; a mass of productive forces, capital funds and conditions, which, on the one hand, is indeed modified by the new generation, but also on the other prescribes for it its conditions of life and gives it a definite development, a special character. It shows that circumstances make men just as much as men make circumstances.

#### Ruling Class and Ruling Ideas

The ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling material force of society, is at the same time its ruling intellectual force. The class which has the

means of material production at its disposal, has control at the same time over the means of mental production, so that thereby, generally speaking, the ideas of those who lack the means of mental production are subject to it. The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas; hence of the relationships which make the one class the ruling one, therefore, the ideas of its dominance. The individuals composing the ruling class possess among other things consciousness, and therefore think. Insofar, therefore, as they rule as a class and determine the extent and compass of an epoch, it is self-evident that they do this in its whole range, hence among other things rule also as thinkers, as producers of ideas, and regulate the production and distribution of the ideas of their age: thus their ideas are the ruling ideas of the epoch. For instance, in an age and in a country where royal power, aristocracy, and bourgeoisie are contending for mastery and where, therefore, mastery is shared, the doctrine of the separation of powers proves to be the dominant idea and is expressed as an “eternal law.”

...One of the most difficult tasks confronting philosophers is to descend from the world of thought to the actual world. *Language* is the immediate actuality of thought. Just as philosophers have given thought an independent existence, so they were bound to make language into an independent realm. This is a secret of philosophical language, in which thoughts in the form of words have their own content. The problem of descending from the world of thoughts to the actual world is turned into the problem of descending from language to life.

We have shown [in Chapter 1] that thoughts and ideas acquire an independent existence in consequence of the personal circumstances and relations of individuals acquiring independent existence. We have shown that exclusive, systematic occupation with these thoughts on the part of ideologists and philosophers, and hence the systemization of these thoughts, is a consequence of division of labour, and that, in particular, German philosophy is a consequence of German petty-bourgeois conditions. The philosophers have only to dissolve their language into the ordinary language, from which it is abstracted, in order to recognize it as the distorted language of the actual world and to realize that neither thoughts nor language in themselves form a realm of their own, that they are only *manifestations* of actual life.

### **Georgi Valentinovich Plekhanov**

Wikipedia:

[https://en.wikipedia.org/wiki/Georgi\\_Plekhanov](https://en.wikipedia.org/wiki/Georgi_Plekhanov)

Georgi Valentinovich Plekhanov (1856-1918) was a Russian revolutionary, philosopher and Marxist theoretician. He was a founder of the social-democratic movement in Russia and was one of the first Russians to identify himself as "Marxist".

**Plekhanov, Georgi**, *Essays on the History of Materialism* (1893)

<https://www.marxists.org/archive/plekhanov/1893/essays/3-marx.htm>

Plekhanov, Georgi, *In Defence of Materialism: The Development of the Monist View of History* (1895)

<https://www.marxists.org/archive/plekhanov/1895/monist/ch01.htm>

What is “materialism in the general philosophical sense”?

*Materialism* is the direct opposite of *idealism*. Idealism strives to explain all the phenomena of Nature, all the qualities of matter, by these or those qualities of the *spirit*. Materialism acts in the exactly opposite way. It tries to explain psychic phenomena by these or those qualities of *matter*, by this or that organisation of the human or, in more general terms, of the animal *body*. All those philosophers in the eyes of whom the prime factor is matter belong to the camp of the *materialists*; and all those who consider such a factor to be the *spirit* are *idealists*.

That is all that can be said about materialism in general, about “materialism in the general philosophical sense”, as time built up on its fundamental principle the most varied superstructures, which gave the materialism of one epoch quite a different aspect from the materialism of another.

Materialism and idealism exhaust the most important tendencies of philosophical thought. True, by their side there have almost always existed *dualist* systems of one kind or another, which recognise *spirit* and *matter* as separate and independent *substances*. *Dualism* was never able to reply satisfactorily to the inevitable question: how could these two separate substances, which have nothing in common between them, influence each other? Therefore the most consistent and most profound thinkers were always inclined to *monism*, i.e., to explaining phenomena with the help of *some one main principle* (*monos* in Greek means “one”). Every consistent *idealist* is a monist to the same extent as every consistent *materialist*. In *this* respect there is no difference, for example, between Berkeley and Holbach. One was a consistent *idealist*, the other a no less consistent *materialist*, but both were equally *monistic*; both one and the other equally well understood the worthlessness of the *dualist outlook on the world*, which up to this day is still, perhaps the most widespread.

Plekhanov, Georgi, *Fundamental Problems of Marxism* (1907)

<https://www.marxists.org/archive/plekhanov/1907/fundamental-problems.htm>

...Idealistic philosophy's point of departure – the ‘I’ as the fundamental philosophical principle – is totally erroneous. It is not the ‘I’ that must be the starting-point of genuine philosophy, but the ‘I’ and the ‘you’. It is such a point of departure that makes it possible to arrive at a proper understanding of the relation between thinking and being, between the subject and the object. I am ‘I’ to myself, and at the same time I am ‘you’ to others. The ‘I’ is the *subject*, and at the same time the *object*. It must at the same time be noted that I am not the abstract being idealistic philosophy operates with. I am an *actual* being; my *body* belongs to my *essence*; moreover, my body, as a whole, is my *I*, my genuine essence. It is not an abstract being that thinks, but that actual being, that body. Thus, contrary to what the idealists assert, an actual and material being proves to be the subject, and thinking – the predicate. Herein lies the only possible solution of the contradiction between being and thinking, a contradiction that idealism sought so vainly to resolve. None of the elements in the contradiction is *removed*; both are *preserved*, revealing their real *unity*. ‘That which to me, or subjectively, is a purely spiritual, non-material and non-sensuous act is in itself an objective, material and sensuous act.’

<https://www.marxist.com/book-the-revolutionary-philosophy-of-marxism/fundamental-problems-of-marxism-excerpts.htm>

[paragraphs broken up for ease of reading]

According to Feuerbach, the unity of subject and object, of thinking and being, makes sense only when man is taken as the basis of that unity. This has a special kind of “humanist” sound to it, and most students of Feuerbach have not found it necessary to give deeper thought to *how* man serves as the basis of the unity of the opposites just mentioned. In actual fact, this is how Feuerbach understood the matter: “It is only when thinking is not a *subject for itself*, but the predicate of a real [that is, material] being that thought is not something separated from being.”

The question now is: Where, in which philosophical systems, is thinking a “subject for itself,” that is to say, something independent of the bodily existence of a thinking individual? The answer is clear: in systems that are *idealist*. The idealists first convert thinking into a self-contained essence, independent of man (“the subject for itself”), and then assert that it is in that essence that the contradiction between being and thinking is resolved, for the very reason that separate and independent being is a property of that independent-of-matter essence. Indeed, the contradiction is resolved in that essence. In that case, what is that essence? It is *thinking*, and this thinking exists—is—independently of anything else. Such a resolution of the contradiction is a purely formal one, which, as we have already pointed out, is achieved only by eliminating one of its elements, namely, being, as something independent of thinking.

Being proves to be a simple property of thinking, so that when we say that a given object exists, we mean that it exists only in our thinking. That is how the matter was understood by Schelling, for example. To him, thinking was the absolute principle from which the real world, that is, Nature and the “finite” spirit, followed of necessity. But *how* did it follow? What was meant by the existence of the real world? Nothing but existence in thinking. To Schelling, the Universe was merely the self-contemplation of the Absolute Spirit. We see the same thing in Hegel.

Feuerbach, however, was not satisfied with such a purely formal resolving of the contradiction between thinking and being. He pointed out that there is no—there can be no—*thinking independent of man*, that is, of an actual and material creature. Thinking is activity of the brain. To quote Feuerbach: “But the brain is the organ of thinking only as long as it is connected with the human head and body.”

We now see in what sense Feuerbach considers man the basis of the unity of being and thinking. Man is that basis in the sense that he is nothing but a material being that possesses the ability to think. If he is such a being, then it is clear that none of the elements of the contradiction is eliminated—neither being nor thinking, “matter” or “spirit,” subject or object. They are all combined in him as the subject-object. “I exist, and I think ... only as a subject-object,” Feuerbach says.

To be does not mean to exist in thought. In this respect, Feuerbach’s philosophy is far clearer than that of J. Dietzgen. As Feuerbach put it: “To prove that something exists means to prove that it is not something that exists only in thought.” This is perfectly true, but it means that the unity of thinking and being does not and cannot in any way mean their identity.

This is one of the most important features distinguishing materialism from idealism.

**Plekhanov, Georgi**, *Essays on History of Materialism, III Marx* (1893)  
<https://www.marxists.org/archive/plekhanov/1893/essays/3-marx.htm>

The ease with which dialectical materialism was able to overcome idealism should seem inexplicable to anyone who lacks a clear understanding of the fundamental question separating the materialists from the idealists. People guided by *dualist* prejudices usually think, for example, that there are *two completely different substances in man: body or matter*, on the one hand, and on the other, the *soul, the spirit*. Though they do not know and often do not even ask how one of these substances can affect the other, people nevertheless consider that they are fully aware it would be “*one-sided*” to explain phenomena with the aid of only one of these two substances. Such people are smugly aware of their superiority over the two extremes, and are *neither* idealists *nor* materialists. However venerable the age of this longstanding mode of considering philosophical questions may be, it is in essence worthy only of the philistine. Philosophy has never been able to feel satisfaction with such “many-sidedness”: on the contrary, it has tried to rid itself of the *dualism* so beloved of *eclectic* minds. The most outstanding philosophical systems have always been monist, i.e., have regarded *spirit* and *matter* merely as two classes of phenomena whose cause is inseparably one and the same.

### **Vladimir Ilyich Lenin**

**Lenin**, *Materialism and Empirio-Criticism* (1909)  
<https://www.marxists.org/archive/lenin/works/1908/mec/intro.htm>

The two fundamental lines of philosophical outlook are here depicted with the straightforwardness, clarity and precision that distinguish the classical philosophers from the inventors of “new” systems in our day. Materialism is the recognition of “objects in themselves,” or outside the mind; ideas and sensations are copies or images of those objects. The opposite doctrine (idealism) claims that objects do not exist “without the mind”; objects are “combinations of sensations.”

...In his work *Ludwig Feuerbach* Engels divides philosophers into “two great camps”—materialists and idealists. Engels—dealing with theories of the two trends much more developed, varied and rich in content than Fraser dealt with—sees the fundamental distinction between them in the fact that while for the materialists nature is primary and spirit secondary, for the idealists the reverse is the case. In between these two camps Engels places the adherents of Hume and Kant, who deny the possibility of knowing the world, or at least of knowing it fully, and calls them agnostics.

<https://www.marxists.org/archive/lenin/works/1908/mec/one1.htm>

...Anybody who reads *Anti-Dühring* and *Ludwig Feuerbach* with the slightest care will find scores of instances when Engels speaks of things and their reflections in the human brain, in our consciousness, thought, etc. Engels does not say that sensations or ideas are “symbols” of things, for consistent materialism must here use “image,” picture, or reflection instead of “symbol,” as we shall show in detail in the proper place. But the question here is not of this or that formulation of materialism, but of the opposition of materialism to idealism, of the difference between the two fundamental *lines* in philosophy. Are we to proceed from things to sensation and thought? Or are we to proceed from thought and sensation to things? The first line, i.e., the materialist line, is adopted by Engels. The second line, i.e., the idealist line, is adopted by Mach. No evasions, no



sophisms (a multitude of which we shall yet encounter) can remove the clear and indisputable fact that Ernst Mach's doctrine that things are complexes of sensations is subjective idealism and a simple rehash of Berkeleianism.

<https://www.marxists.org/archive/lenin/works/1908/mec/one3.htm>

The different methods of expression used by Berkeley in 1710, by Fichte in 1801, and by Avenarius in 1891-94 do not in the least change the essence of the matter, *viz.*, the fundamental philosophical line of subjective idealism. The world is my sensation; the non-*self* is "postulated" (is created, produced) by the *self*; the thing is indissolubly connected with the consciousness; the indissoluble co-ordination of the *self* and the environment is the empirio-critical principal coordination;—this is all one and the same proposition, the same old trash with a slightly refurbished, or repainted, signboard.

The reference to "naïve realism," supposedly defended by this philosophy, is *sophistry* of the cheapest kind. The "naïve realism" of any healthy person who has not been an inmate of a lunatic asylum or a pupil of the idealist philosophers consists in the view that things, the environment, the world, exist *independently* of our sensation, of our consciousness, of our *self* and of man in general. The same *experience* (not in the Machian sense, but in the human sense of the term) that has produced in us the firm conviction that *independently* of us there exist other people, and not mere complexes of my sensations of high, short, yellow, hard, etc.—this same *experience* produces in us the conviction that things, the world, the environment exist independently of us. Our sensation, our consciousness is only *an image* of the external world, and it is obvious that an image cannot exist without the thing imaged, and that the latter exists independently of that which images it. Materialism *deliberately* makes the "naïve" belief of mankind the foundation of its theory of knowledge.

JK: Lenin's use of the term "image" and also of "reflection" has received widespread criticism from other Marxists and also from mainstream philosophers. This has been in part due to the passive nature implied -- we receive "images" and "reflections." Neuroscientific research has shown the very active nature of human (and other animal) perception, which includes extensive feedback loops. However, because Lenin said it, generations of Marxist-Leninists have accepted the terms.

## **Nikolai Bukharin**

Wikipedia:

[https://en.wikipedia.org/wiki/Nikolai\\_Bukharin](https://en.wikipedia.org/wiki/Nikolai_Bukharin)

**Nikolai Ivanovich Bukharin** was a Russian revolutionary, Soviet politician, and Marxist theorist. A prolific author on economic theory, Bukharin was a prominent Bolshevik and was active in the leadership of the Communist Party of the Soviet Union from 1917 until his purge and execution in the 1938.

**Bukharin**, *Historical Materialism a System of Sociology. Materialism and Idealism in Philosophy; the Problem of the Objective* (1925)

<https://www.marxists.org/archive/bukharin/works/1921/histmat/3.htm>

In general, we distinguish between two kinds of phenomena. Phenomena of the one kind have *extension*, occupy space, are observed through our external senses: we may see them, hear them, feel them, taste them, etc.; such we call material phenomena. Others have no place in space and cannot be felt or seen. Such, for example, are the human mind, or will, or feeling. But no one can doubt their existence. The philosopher Descartes considered just this circumstance to be the proof of man's existence; Descartes said "*Cogito, ergo sum*" -- I think, therefore I am. Yet, man's thought cannot be felt or smelt; it has no color and cannot be directly measured in yards or meters. Such phenomena are called *psychical*; in simple language, "spiritual". We have now to consider the question of the relation between these two kinds of phenomena. Is the mind "the beginning of all things", or is it matter? Which comes first; which is the basis; does matter produce mind or does mind produce matter? What is the relation between the two? This question involves the fundamental conception of philosophy, on the answer to which depend the answers to many other questions in the domain of the social sciences.

Let us try to consider it from as many standpoints as possible. First of all, we must bear in mind that man is a part of nature. We cannot know for certain whether other more highly organized creatures exist on other planets, although it is probable that such do exist, for the number of planets seems endless. But it is clearly apparent to us that the being called "man" is not a divine creature, standing outside of the world, projected from some other, unknown, mysterious universe, but, as we know from the natural sciences, he is a product and a portion of nature, subject to its general laws. From the example of the world as we know it, we find that psychic phenomena, the phenomena of the so called "spirit", are an infinitesimal portion of the sum of all phenomena. In the second place, we know that man has sprung from other animals, and that, after all, "living creatures" have been in existence on earth only for a time. When the earth was still a flaming sphere, resembling the sun today, long before it had cooled, there was no life on its surface, nor thinking creatures of any kind. Organic nature grew out of dead nature; living nature produced a form capable of thought. First, we had matter, incapable of thought; out of which developed thinking matter, man. If this is the case - and we know it is, from natural science - it is plain that matter is the mother of mind; mind is not the mother of matter. Children are never older than their parents. "Mind" comes later, and we must therefore consider it the offspring, and not the parent, as the immoderately partisan worshippers of everything "spiritual" would make it.

In the third place: "mind" does not appear until we already have *matter organized in a certain manner*.

A zero cannot think; nor can a doughnut - or the hole in it - think; nor can "mind" think without matter. Man's brain, a part of man's organism, thinks. And man's organism is matter organized in a highly intricate form.

In the fourth place: it is quite clear from the above why matter may exist without mind, while "mind" may not exist without matter. Matter existed before the appearance of a thinking human; the earth existed long before the appearance of any kind of "mind" on its surface. In other words, matter exists objectively, independently of "mind". But the psychic phenomena, the so called "mind", never and nowhere existed without matter, were never independent of matter. Thought does not exist without a brain; desires are impossible unless there is a desiring organism. "Mind" is *always* closely connected with "matter" (only in the Bible do we find the "spirit" hovering

unaided over the waters). In other words: psychic phenomena, the phenomena of consciousness, are simply *a property of matter organized in a certain manner, a "function" of such matter* (a function of a certain quantity is a second quantity depending on the first). Now man is a very delicately organized creature. Destroy this organization, disorganize it, take it apart, cut it up, and the "mind" at once disappears. If men were able to put together this system again, to assemble the human organism, in other words, if it were possible to take a human body apart and put it together again just as one may do with the parts of a clock, consciousness would also at once return; once the clock has been reassembled it will operate and start to tick; put together the human organism, and it will start to think. Of course, we are not yet able to do this. But we have already seen, in our discussion of determinism, that the state of "mind" of the consciousness, depends on the state of the organism. Intoxicate the organism with alcohol, the consciousness will become confused, the mind is befuddled. Restore the organism to its normal state (for instance, administer antidotes for toxic substances) and the mind will again begin to work in the normal manner. The above clearly shows the dependence of consciousness on matter, or in other words, "of thought on life".

We have seen that psychical phenomena are a property of matter organized in a certain manner. We may therefore have various fluctuations, various forms of material organization, and also various forms of mental life. *Man*, with his brain, is organized in one manner - he has the most perfect psychical life on earth - a true consciousness; the *dog* is organized in a different manner and the psyche of the dog therefore differs from that of man; the *worm* is also organized in a special manner, and the "mind" of the worm is consequently extremely poor, by no means comparable with that of man; the organization of the *stone* places it with inanimate matter, and it therefore has no psychic life at all. A special and intricate organization of matter is required for the appearance of a psyche. An extremely intricate organization of matter is the necessary presupposition for the appearance of an intricate psychic life, which we call a consciousness. On earth, this consciousness appears only when matter has been organized, as in the case of man, with his most complicated instrument, the brain in his head.

*Thus, mind cannot exist without matter, while matter may very well exist without mind; matter existed before mind; mind is a special property of matter organized in a special manner.*

JK: Later we'll explore further what it means to say that "mind is a special property of matter" and we will see evidence that the mind may not in fact be limited by the body it is said to occupy.

Next is **Mao Zedong** on idealism and materialism.

**Mao Zedong**, *On Practice* (1937)

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_16.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_16.htm)

...All knowledge originates in perception of the objective external world through man's physical sense organs. Anyone who denies such perception, denies direct experience, or denies personal participation in the practice that changes reality, is not a materialist. That is why the "know-all" is ridiculous. There is an old Chinese saying, "How can you catch tiger cubs without entering the tiger's lair?" This saying holds true for man's practice and it also holds true for the theory of knowledge. There can be no knowledge apart from practice.

...Here two important points must be emphasized. The first, which has been stated before but should be repeated here, is the dependence of rational knowledge upon perceptual knowledge. Anyone who thinks that rational knowledge need not be derived from perceptual knowledge is an idealist. In the history of philosophy there is the "rationalist" school that admits the reality only of reason and not of experience, believing that reason alone is reliable while perceptual experience is not; this school errs by turning things upside down. The rational is reliable precisely because it has its source in sense perceptions, otherwise it would be like water without a source, a tree without roots, subjective, self-engendered and unreliable. As to the sequence in the process of cognition, perceptual experience comes first; we stress the significance of social practice in the process of cognition precisely because social practice alone can give rise to human knowledge and it alone can start man on the acquisition of perceptual experience from the objective world. For a person who shuts his eyes, stops his ears and totally cuts himself off from the objective world there can be no such thing as knowledge. Knowledge begins with experience--this is the materialism of the theory of knowledge.

...Idealism and mechanical materialism, opportunism and adventurism, are all characterized by the breach between the subjective and the objective, by the separation of knowledge from practice. The Marxist-Leninist theory of knowledge, characterized as it is by scientific social practice, cannot but resolutely oppose these wrong ideologies. Marxists recognize that in the absolute and general process of development of the universe, the development of each particular process is relative, and that hence, in the endless flow of absolute truth, man's knowledge of a particular process at any given stage of development is only relative truth. The sum total of innumerable relative truths constitutes absolute truth. The development of an objective process is full of contradictions and struggles, and so is the development of the movement of human knowledge. All the dialectical movements of the objective world can sooner or later be reflected in human knowledge. In social practice, the process of coming into being, developing and passing away is infinite, and so is the process of coming into being, developing and passing away in human knowledge. As man's practice which changes objective reality in accordance with given ideas, theories, plans or programmes, advances further and further, his knowledge of objective reality likewise becomes deeper and deeper. The movement of change in the world of objective reality is never-ending and so is man's cognition of truth through practice. Marxism-Leninism has in no way exhausted truth but ceaselessly opens up roads to the knowledge of truth in the course of practice. Our conclusion is the concrete, historical unity of the subjective and the objective, of theory and practice, of knowing and doing, and we are opposed to all erroneous ideologies, whether "Left" or Right, which depart from concrete history.

**Mao Zedong, *On Contradiction* (1937)**

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_17.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_17.htm)

## I. THE TWO WORLD OUTLOOKS

Throughout the history of human knowledge, there have been two conceptions concerning the law of development of the universe, the metaphysical conception and the dialectical conception, which form two opposing world outlooks. Lenin said:

The two basic (or two possible? or two historically observable?) conceptions of development (evolution) are: development as decrease and increase, as repetition, *and* development as a unity of opposites (the division of a unity into mutually exclusive opposites and their reciprocal relation).

Here Lenin was referring to these two different world outlooks.

In China another name for metaphysics is *hsuan-hsueh*. For a long period in history whether in China or in Europe, this way of thinking, which is part and parcel of the idealist world outlook, occupied a dominant position in human thought. In Europe, the materialism of the bourgeoisie in its early days was also metaphysical. As the social economy of many European countries advanced to the stage of highly developed capitalism, as the forces of production, the class struggle and the sciences developed to a level unprecedented in history, and as the industrial proletariat became the greatest motive force in historical development, there arose the Marxist world outlook of materialist dialectics. Then, in addition to open and barefaced reactionary idealism, vulgar evolutionism emerged among the bourgeoisie to oppose materialist dialectics.

The metaphysical or vulgar evolutionist world outlook sees things as isolated, static and one-sided. It regards all things in the universe, their forms and their species, as eternally isolated from one another and immutable. Such change as there is can only be an increase or decrease in quantity or a change of place. Moreover, the cause of such an increase or decrease or change of place is not inside things but outside them, that is, the motive force is external. Metaphysicians hold that all the different kinds of things in the universe and all their characteristics have been the same ever since they first came into being. All subsequent changes have simply been increases or decreases in quantity. They contend that a thing can only keep on repeating itself as the same kind of thing and cannot change into anything different. In their opinion, capitalist exploitation, capitalist competition, the individualist ideology of capitalist society, and so on, can all be found in ancient slave society, or even in primitive society, and will exist for ever unchanged. They ascribe the causes of social development to factors external to society, such as geography and climate. They search in an over-simplified way outside a thing for the causes of its development, and they deny the theory of materialist dialectics which holds that development arises from the contradictions inside a thing. Consequently they can explain neither the qualitative diversity of things, nor the phenomenon of one quality changing into another. In Europe, this mode of thinking existed as mechanical materialism in the 17th and 18th centuries and as vulgar evolutionism at the end of the 19th and the beginning of the 20th centuries. In China, there was the metaphysical thinking exemplified in the saying "Heaven changeth not, likewise the Tao changeth not," and it was supported by the decadent feudal ruling classes for a long time. Mechanical materialism and vulgar evolutionism, which were imported from Europe in the last hundred years, are supported by the bourgeoisie.

As opposed to the metaphysical world outlook, the world outlook of materialist dialectics holds that in order to understand the development of a thing we should study it internally and in its relations with other things; in other words, the development of things should be seen as their internal and necessary self-movement, while each thing in its movement is interrelated with and interacts on the things around it. The fundamental cause of the development of a thing is not external but internal; it lies in the contradictoriness within the thing. There is internal contradiction

in every single thing, hence its motion and development. Contradictoriness within a thing is the fundamental cause of its development, while its interrelations and interactions with other things are secondary causes. Thus materialist dialectics effectively combats the theory of external causes, or of an external motive force, advanced by metaphysical mechanical materialism and vulgar evolutionism. It is evident that purely external causes can only give rise to mechanical motion, that is, to changes in scale or quantity, but cannot explain why things differ qualitatively in thousands of ways and why one thing changes into another.

As a matter of fact, even mechanical motion under external force occurs through the internal contradictoriness of things. Simple growth in plants and animals, their quantitative development, is likewise chiefly the result of their internal contradictions. Similarly, social development is due chiefly not to external but to internal causes. Countries with almost the same geographical and climatic conditions display great diversity and unevenness in their development. Moreover, great social changes may take place in one and the same country although its geography and climate remain unchanged. Imperialist Russia changed into the socialist Soviet Union, and feudal Japan, which had locked its doors against the world, changed into imperialist Japan, although no change occurred in the geography and climate of either country. Long dominated by feudalism, China has undergone great changes in the last hundred years and is now changing in the direction of a new China, liberated and free, and yet no change has occurred in her geography and climate. Changes do take place in the geography and climate of the earth as a whole and in every part of it, but they are insignificant when compared with changes in society; geographical and climatic changes manifest themselves in terms of tens of thousands of years, while social changes manifest themselves in thousands, hundreds or tens of years, and even in a few years or months in times of revolution.

According to materialist dialectics, changes in nature are due chiefly to the development of the internal contradictions in nature. Changes in society are due chiefly to the development of the internal contradictions in society, that is, the contradiction between the productive forces and the relations of production, the contradiction between classes and the contradiction between the old and the new; it is the development of these contradictions that pushes society forward and gives the impetus for the supersession of the old society by the new. Does materialist dialectics exclude external causes? Not at all. It holds that external causes are the condition of change and internal causes are the basis of change, and that external causes become operative through internal causes. In a suitable temperature an egg changes into a chicken, but no temperature can change a stone into a chicken, because each has a different basis.

There is constant interaction between the peoples of different countries. In the era of capitalism, and especially in the era of imperialism and proletarian revolution, the interaction and mutual impact of different countries in the political, economic and cultural spheres are extremely great. The October Socialist Revolution ushered in a new epoch in world history as well as in Russian history. It exerted influence on internal changes in the other countries in the world and, similarly and in a particularly profound way, on internal changes in China. These changes, however, were effected through the inner laws of development of these countries, China included. In battle, one army is victorious and the other is defeated, both the victory and the defeat are determined by internal causes. The one is victorious either because it is strong or because of its competent generalship, the other is vanquished either because it is weak or because of its incompetent

generalship; it is through internal causes that external causes become operative. In China in 1927, the defeat of the proletariat by the big bourgeoisie came about through the opportunism then to be found within the Chinese proletariat itself (inside the Chinese Communist Party). When we liquidated this opportunism, the Chinese revolution resumed its advance. Later, the Chinese revolution again suffered severe setbacks at the hands of the enemy, because adventurism had risen within our Party. When we liquidated this adventurism, our cause advanced once again. Thus it can be seen that to lead the revolution to victory, a political party must depend on the correctness of its own political line and the solidity of its own organization.

The dialectical world outlook emerged in ancient times both in China and in Europe. Ancient dialectics, however, had a somewhat spontaneous and naive character; in the social and historical conditions then prevailing, it was not yet able to form a theoretical system, hence it could not fully explain the world and was supplanted by metaphysics. The famous German philosopher Hegel, who lived in the late 18th and early 19th centuries, made most important contributions to dialectics, but his dialectics was idealist. It was not until Marx and Engels, the great protagonists of the proletarian movement, had synthesized the positive achievements in the history of human knowledge and, in particular, critically absorbed the rational elements of Hegelian dialectics and created the great theory of dialectical and historical materialism that an unprecedented revolution occurred in the history of human knowledge. This theory was further developed by Lenin and Stalin. As soon as it spread to China, it wrought tremendous changes in the world of Chinese thought.

This dialectical world outlook teaches us primarily how to observe and analyse the movement of opposites in different things and, on the basis of such analysis, to indicate the methods for resolving contradictions. It is therefore most important for us to understand the law of contradiction in things in a concrete way.

... In speaking of the identity of opposites in given conditions, what we are referring to is real and concrete opposites and the real and concrete transformations of opposites into one another. There are innumerable transformations in mythology, for instance, Kua Fu's race with the sun in *Shan Hai Ching*, Yi's shooting down of nine suns in *Huai Nan Tzu*, the Monkey King's seventy-two metamorphoses in *Hsi Yu Chi*, the numerous episodes of ghosts and foxes metamorphosed into human beings in the *Strange Tales of Liao Chai*, etc. But these legendary transformations of opposites are not concrete changes reflecting concrete contradictions. They are naive, imaginary, subjectively conceived transformations conjured up in men's minds by innumerable real and complex transformations of opposites into one another. Marx said, "All mythology masters and dominates and shapes the forces of nature in and through the imagination; hence it disappears as soon as man gains mastery over the forces of nature." The myriads of changes in mythology (and also in nursery tales) delight people because they imaginatively picture man's conquest of the forces of nature, and the best myths possess "eternal charm", as Marx put it; but myths are not built out of the concrete contradictions existing in given conditions and therefore are not a scientific reflection of reality. That is to say, in myths or nursery tales the aspects constituting a contradiction have only an imaginary identity, not a concrete identity. The scientific reflection of the identity in real transformations is Marxist dialectics.

## VII. CONCLUSION

We may now say a few words to sum up. The law of contradiction in things, that is, the law of the unity of opposites, is the fundamental law of nature and of society and therefore also the fundamental law of thought. It stands opposed to the metaphysical world outlook. It represents a great revolution in the history of human knowledge. According to dialectical materialism, contradiction is present in all processes of objectively existing things and of subjective thought and permeates all these processes from beginning to end; this is the universality and absoluteness of contradiction. Each contradiction and each of its aspects have their respective characteristics; this is the particularity and relativity of contradiction. In given conditions, opposites possess identity, and consequently can coexist in a single entity and can transform themselves into each other; this again is the particularity and relativity of contradiction. But the struggle of opposites is ceaseless, it goes on both when the opposites are coexisting and when they are transforming themselves into each other, and becomes especially conspicuous when they are transforming themselves into one another; this again is the universality and absoluteness of contradiction. In studying the particularity and relativity of contradiction, we must give attention to the distinction between the principal contradiction and the non-principal contradictions and to the distinction between the principal aspect and the non-principal aspect of a contradiction; in studying the universality of contradiction and the struggle of opposites in contradiction, we must give attention to the distinction between the different forms of struggle. Otherwise we shall make mistakes. If, through study, we achieve a real understanding of the essentials explained above, we shall be able to demolish dogmatist ideas which are contrary to the basic principles of Marxism-Leninism and detrimental to our revolutionary cause, and our comrades with practical experience will be able to organize their experience into principles and avoid repeating empiricist errors. These are a few simple conclusions from our study of the law of contradiction.



# Perspective



**The Andromeda Galaxy contains approximately  
one trillion stars (1,000,000,000,000)**

Source: NASA/JPL-Caltech  
<https://www.astronomy.com/science/andromeda-may-have-eaten-the-milky-ways-long-lost-sibling/>

### How small is the Planck length?

It would be impossible to show the Planck length to scale here – so let's settle for scaling down the size of an atom, which, as we all know, are really, really small...

Thickness of a sheet of paper    Skin cell    E.coli bacterium    Largest virus    Hepatitis B virus

Atom    Glucose molecule    DNA

Let's say that this **atom** is **0.0000000001 meters** in diameter (about 100,000 times smaller than anything you can see with the naked eye). If you were to try to measure the diameter of this atom in **Planck lengths** by counting one Planck length every second, it would take you about **10,000,000 times the current age of the Universe** (that's 10million times 13.8billion years)

Source: <https://physconomic.wordpress.com/2018/01/14/what-is-the-smallest-possible-measurement-of-length/>

**Is there a bottom? Is there a top?**

## Chapter 6 Dialectical Materialism and Quantum Theory

“Things” at the subatomic scale are quite different from what they are at the macroscopic level. In fact, physicists debate today whether there are any “things” at subatomic lengths. Fields and particles are the primary units of discourse, and opinions range all over the place.

In the early 20<sup>th</sup> century scientists had to come up with a drastic new approach to understand experiments in physics, resulting in the equations of quantum mechanics to describe the startling phenomena which take place at minute scales. We read such things as

- You cannot measure the velocity and location of a particle at the same time -- the principle of complementarity.
- A cat which may or may not be dead - Schrödinger's cat.
- the Copenhagen interpretation of the quantum world - though even the main progenitors, Niels Bohr and Werner Heisenberg, did not agree on an interpretation.

Quantum mechanics gets the most accurate results in human history.

“Standard physics at its most fundamental level is now entirely described by quantum fields, and this description has proved quantitatively accurate to about ten significant figures.”

<https://arxiv.org/ftp/arxiv/papers/2404/2404.11724.pdf>

But:

As I see it, we live in an incredibly exciting time for physics in particular and for science in general. We now know, with a reasonable degree of precision, that about **5% of the mass-energy of the Universe is made up of stuff we understand:** hydrogen and other elements, or constituents like protons, neutrons, quarks, electrons, muons, neutrinos, photons, and the other fundamental particles of the Standard Model. Five percent! **The rest is about 25% dark matter, about which we understand nothing, and about 70% dark energy, about which we understand even less.** What could be more exciting than to inhabit a universe where about 95% of everything is waiting to be understood? We know that two of the most well-established theories ever devised—General Relativity and Quantum Mechanics—theories whose tight construction is pure beauty, are incompatible with each other. There is another theory, waiting to be discovered, that will unify these two. These are only a sampling of what we do not yet understand. And to make matters even more delicious, experiments are underway that may provide clues to the solution of these mysteries in my lifetime. The full solution will probably take longer, but considering that it was a few centuries between Newton and Einstein, that is no surprise. Truly fundamental changes in our understanding

of physics await, and I am eager to see some of those changes and perhaps even participate in them. [Emphasis added]

*The future of physics* by William D Phillips (2024)

<https://arxiv.org/ftp/arxiv/papers/2404/2404.11724.pdf>

Present-day physics (and chemistry) has built on and surpassed the pioneers who developed quantum physics and relativity. But as noted by Phillips, our most advanced science is 95% clueless about what the universe is made of.

In this chapter we will look at the perspectives of a few of the pioneers -- Bohr and Einstein, Max Born, Léon Rosenfeld, David Bohm, and Sakata Shoichi -- and the relationship of quantum mechanics to Marxist dialectics.

For background on the history of the atomic theory, let's see how Pascual Jordan put it. Jordan was an important contributor to the development of quantum theory, though his name is not well known. He had a gift for writing but a serious stutter hindered his teaching appointments and activities, no doubt affecting his job possibilities and reputation.

[https://en.wikipedia.org/wiki/Pascual\\_Jordan](https://en.wikipedia.org/wiki/Pascual_Jordan)

**Pascual Jordan**, *The Discovery of Atoms*; excerpt from *Science and the Course of History* (1954)

<https://www.informationphilosopher.com/solutions/scientists/jordan/>

In the earliest beginnings of a rational approach to natural phenomena we encounter a very modern idea: the atomic theory was developed in antiquity; it formed the basis of a philosophical *Weltanschauung* [worldview] as we should call it today. Its creator was Democritus, a solitary thinker, understood by next to none of his contemporaries, regarded as a madman by his neighbors and fellow citizens. [Democritus](#) had his philosophical precursors, and there were a few successors who attempted to develop his ideas. But essentially the ancient atomic philosophy was all his own.

We have come to take his doctrine so much for granted that we scarcely appreciate its great intellectual audacity. Democritus taught that all matter — we still use the term today, but the very concept of matter was first defined through Democritus' ideas — consists of innumerable tiny particles, which he held to be immutable, hence indestructible and untreatable. In moving through empty space, colliding and exerting a mechanical action upon one another, these particles give rise to what should be regarded as the real, objective world; our crude senses give us only a blurred, imprecise, complexly veiled picture of this objective world of indestructible atoms.

When Democritus in his solitude developed these ideas, the ancient mythological view of the world was still accepted by his contemporaries, who merely shook their heads at him. They still believed in demons, nymphs, demigods and other mythological beings, to whose arbitrary intervention they attributed all conspicuous natural phenomena. In his atomic philosophy, Democritus for the first time expounded the great idea of a nature governed by law. Essentially he was the founder and first proponent of scientific thinking.

Like other intellectual achievements of antiquity, the atomic philosophy was almost entirely forgotten for many centuries. But in the age of the Renaissance, when the Western spirit sought new inspiration in the cultural heritage of antiquity, the old atomic philosophy was rediscovered. It has become a fruitful source of scientific ideas.

In the centuries that have elapsed since then nearly all our physicists have derived significant guidance from the atomic theory. The history of chemistry would be scarcely conceivable without the notion of atoms. For when such men as Boyle and Dalton strove to emerge from the confusion of alchemistic doctrines, in which the facts of experience were shrouded and almost totally concealed by mythological, symbolic, and allegorical thinking, the concept of the atom was the thread that led them out of the labyrinth to clear ideas about the nature of chemical processes. In the field of physics, the atomic theory proved particularly fruitful when heat phenomena were being investigated during the age of the steam engine. With the help of brilliant mathematical analyses Maxwell in England, Boltzmann in Germany, Gibbs in America showed heat to be a hidden, statistically irregular motion of the infinitesimal atoms which constitute matter.

But despite the signal success of the atomic theory in physics and chemistry, a few outstanding physicists and chemists at the beginning of the twentieth century criticized it sharply. They pointed out that after almost two thousand years of speculation there was no really cogent proof of the existence of atoms. They admitted that the atomic hypothesis had provided any number of fruitful ideas, but insisted that it had never been conclusively proved. No one could refute their contention that the whole atomic theory was probably nothing more than an idle speculation and an ancient fallacy, and consequently the results obtained on the basis of it might well be illusory.

This was the situation at the beginning of our century: despite everything that had been accomplished by the atomic theory since the Renaissance, no one could say with certainty that any such things as atoms existed. It is not surprising that these outspoken critics created a panic among their colleagues; the very foundations of physics and chemistry, which for centuries had been regarded as secure, seemed to have been shaken.

And yet this criticism proved beneficial. Great minds brought new zeal to what had become the crucial problem in physics: to prove the reality of the atoms; to devise experiments which would show irrefutably that the atoms actually exist.

This problem, as we know, was solved. We cannot relate in detail how the physicists of our century succeeded in breaking into the realm of the atoms, how they bored their way into this profound, hidden stratum of material reality. One of the crucial proofs, in any event, was arrived at by Einstein, who found that certain hitherto neglected experimental data ("Brownian motion") lent unquestionable support to the theory developed by Maxwell, Boltzmann, and Gibbs that heat was simply a motion of countless infinitesimal atoms.

Another important achievement was the discovery of the electron, which was effected in several steps, the most important being the investigation of cathode rays.

But the inquiry into the reality of the atom carried on in the early part of our century accomplished far more than to prove that Democritus was right. It also gave us a thorough knowledge of the

atoms. As the physicists of our day explored this hidden stratum, a whole new world opened before them — and science garnered in the richest harvest of its entire history. Not only has the existence of atoms, doubted by excellent authorities only fifty years ago, been securely demonstrated; but in addition the whole realm of the atoms has been thoroughly explored and illuminated; its secrets have been unveiled, its riddles solved.

Many outstanding scientists share in the glory of these discoveries. And indeed, it would seem as though physics had attracted a conspicuous proportion of the outstanding minds of our age. The names are so numerous that we cannot begin to mention all of them. Suffice it to say that Lord Rutherford achieved epoch-making results in investigating the structure of the atom. For what we call an atom today has itself a structure; it is by no means an ultimate, simple component of matter. We habitually call the smallest unit of a chemical element an atom. But these atoms, it has been found, are themselves composed. We term their ultimate components "elementary particles" — and it is these ultimate units of matter that correspond to Democritus' conception of "atoms."

The matter of all chemical elements consists of three varieties of elementary particles: electrons, protons, and neutrons. The structure of an atom — taking the concept in the modern sense — may be described as follows. In the center is the much smaller atomic nucleus, composed of protons and neutrons. Nearly the entire mass of the atom is contained in this nucleus. But the volume of the atom is made up almost entirely of its electrons, although these constitute less than one-thousandth of its mass. When atoms are combined into molecules through chemical processes, the nuclei of the atoms involved remain totally unchanged; certain changes occur only in the relations between the electrons. This fact is in keeping with the fundamental law of chemistry that in all chemical reactions the quantities of the elements involved remain unchanged — for the chemical nature of an atom is conditioned by the structure of its nucleus (or more precisely, by the number of protons in the nucleus).

JK: The complex relationship between the nucleus and the electrons in an atom seems on its face to be a "dialectical relationship," although this point is rarely brought out when examples of dialectics in nature are suggested. Jordan was writing before quarks became part of quantum mechanics and dismissing the idea that protons, neutrons and electrons were the "ultimate" building blocks of nature.

Resuming Pascual:

So far everything seems perfectly simple, although these seemingly simple results required no end of the most ingenious and painstaking calculation and experiment. But what is really impressive about modern atomic research is this: that it disclosed natural laws of an entirely different order from those previously investigated in the world of larger, cruder bodies. The first indication of the totally novel conditions that had so long lain undiscovered in the inaccessible substratum of the atomic world was detected by Max Planck at the very beginning of our century. Compared with the conclusions that were subsequently derived from it, Planck's discovery was only a first step. But it was the decisive step. With it physics entered on wholly new and unsuspected paths.

Planck's so-called quantum theory formulated the natural law that had to do with the peculiarly discontinuous reactions of atoms, electrons, protons, and so on. It was taken up by the leading physicists of our time, who amplified it and through it achieved remarkable triumphs. The

development of the quantum theory, indissolubly linked with the atomic discoveries it has made possible, strikes us as the most dramatic event in the history of physics since 1900. Einstein's theory of relativity, although not directly connected with the quantum theory, has also considerably helped the physicists who were seeking to solve the riddles raised by the quantum jumps, by the continuous reactions of the atoms. For Einstein's example encouraged them to an unprecedented boldness of thought. Moreover, Einstein himself made revolutionary contributions to the quantum theory. And the great discoveries of other investigators in this field — here we can mention only Niels Bohr and Werner Heisenberg — brought astounding results.

The atomic world held many surprises in store. And strangest of all, it was found that the principle of [causality](#), the basic principle of all science up until then, is no longer applicable to this realm, where it is replaced by general statistical laws. The quantum physicists did not draw these far-reaching inferences until the problems connected with atomic quanta had been solved so clearly and conclusively as to leave no possible room for doubt. Scientific thinking had entered upon a new age. Not since Democritus had there been such an upheaval in scientific ideas.

If today we think back to Democritus, it is because we are in a better position than ever before to appreciate the towering stature of this solitary thinker. There is no similar case in the whole history of science: A dreamer far in advance of his time puts forth a theory which cannot be proved until more than two thousand years later; but then it is confirmed. And meanwhile this theory has influenced, inspired, shaped all scientific thought.

But our present epoch, which has confirmed the atomic theory, also marks the end of the scientific era dominated by Democritus' ideas. On the one hand we have established the reality of the atoms, so proving once and for all that Democritus was right; but on the other hand the investigation of the atomic quanta has proved that the laws governing the atomic world are of an entirely different nature than Democritus and his successors supposed. The transcending of the principle of causality characterizes this century as an incomparable turning point in the development of human thought.

By 1927 the quantum physicists, overcoming gigantic difficulties, had solved all the basic problems relating to the electronic husks of the atoms. Since then vast efforts have been devoted to the nuclei.

In a short time a new branch of physics has grown from small beginnings. In regard to fundamentals, nuclear physics has registered no such revolutionary advances as the earlier investigation of the electronic husks of the atoms. But all of us know that the technical applications of nuclear physics have been no less revolutionary than the theoretical findings of quantum physics. Both aspects of scientific activity, the theoretical penetration that leads to deeper insights and the practical mastery of nature through the technical exploitation of these insights, have been prodigiously realized in these modern developments. In this retrospective view of the remote and recent past we have attempted to gain a profounder understanding of our own times. Today the world is stricken with anxiety over the terrible possibilities of atomic warfare. But at the same time the transformation that has occurred in our scientific view of the world gives us food for reflection along entirely different lines. In the era inaugurated by Democritus our scientific thinking was forced into a definite philosophical position. But in recent years the dangerous one-sidedness of a mechanistic view of nature, as propounded by Democritus, has become evident. The great turning

point in scientific knowledge that we are experiencing today opens up new perspectives for our reflection on the problems of nature and man, world and God.

**Jordan, Pascual**, *Atoms and Organisms*

<https://www.informationphilosopher.com/solutions/scientists/jordan/>

It is true that the notion of the atom as such is far older; it was worked out in ancient times by Democritus. But although the doctrine of Democritus provided guidance for the whole development of Western science beginning with the Renaissance, there was still disagreement among physicists in 1900 as to whether we should take the concept of the atom quite seriously. It is only in our century that the reality of the atoms has been proved convincingly, that these infinitesimal basic structures of matter have been investigated experimentally.

But this advance brought about a profound — and quite unsought-for — change in our view of nature. Up to our century scientists held a very definite conception of natural law, a conception first formulated in Democritus' atomic philosophy. The following example may serve to illustrate it.

The movements of the planets and their moons are such that we can predict them: solar eclipses, lunar eclipses, and the entire movement of the other planets and moons can be calculated in advance by the astronomer. Here then there is no possibility of surprising, unforeseen events; everything operates with the certainty of clockwork. The course of things is predetermined and immutable. Anyone familiar with the natural laws involved can calculate in advance what will happen.

Democritus' view of nature led us to suppose that all natural processes were governed by such necessity, that all nature operated like a machine. For Democritus taught that nature seen in its objective reality, unclouded by our inadequate sense organs, consists in a multiplicity of atoms moving in empty space. He conceived of these atoms as minute bodies which, like the huge heavenly bodies, are subject to the laws of mechanics. Thus in accordance with the laws of nature every atom must effect a predetermined motion, and like the planetary system the total system of these atoms is subject to compelling necessity. Nature as a whole and in every infinitesimal detail moves like clockwork, like a machine.

We shall not deny that these ideas of Democritus represented a great and fruitful achievement. At a time when the old mythological view of nature was still very much alive Democritus fashioned his picture of a nature governed by law, a picture so profound that the scientists of two millennia followed him in the conviction that all natural processes are [predetermined](#) and that there are no exceptions or gaps in this determinism.

But now that we have at last learned to look into the realm of the atoms and recognize the atoms as realities, we can no longer let our imagination decide how these atoms are constituted and according to what laws they react. We confront the reality and must accept what it shows us. The result is an almost overpowering surprise: the natural laws that govern the realm of the atoms do not provide for an unbroken determinism; they are so entirely different from anything that the human imagination had expected as to justify Heisenberg, the eminent physicist, in saying that the physics of the atoms and quanta has definitively refuted the principle of causality.



Nevertheless, these laws are perfectly clear and exact; but they are statistical laws, which determine only the average reaction of large quantities of atoms, while within this frame each individual atom remains inalienably free and unpredictable. If, for example, we have before us a milligram of radium atoms — a milligram will comprise innumerable atoms — natural law determines how many of them will disintegrate in the next second; for that is a statistical question, a question applying to the mass process. But if we take a single radium atom, the law leaves it open as to when this single atom will disintegrate — perhaps today and perhaps in thousands of years. And it is not human ignorance that makes this prediction impossible. It is objectively uncertain when the disintegration will take place; natural law as such sets down only statistical decrees for the atoms.

[End Jordan]

JK: As non-scientists, we are beholden to the relatively few individuals who understand the abstruse equations which power the tech of the modern world, while opinions among them differ widely about what the theory tells us about what exists in the world. There are at least 17 interpretations of quantum mechanics (Wikipedia). Nothing prevents us laypeople from choosing one of the interpretations, but to what end?

While we mull that thought, how did Marxists weigh in on atomic phenomena and particularly quantum mechanics?

Let's step back a bit and look at the controversy over “empirio-criticism.” Physicist and philosopher Ernst Mach had the view, even prior to quantum physics, that we could only go by what our instruments tell us about phenomena. What they tell us derives from measurements in the macroscopic world about events occurring on a tiny scale and at unbelievable speeds. Positivists in general and “empirio-critics” in particular held that all we can say is what the macroscopic measurements in an experiment show us. We cannot say anything about any reality undergirding atomic events.

Lenin and others held that, on the contrary, there is an objective world which preceded our human species. This is the common sense view. As Einstein later said, Can I really believe when I shut my eyes, the moon is no longer there? We actually have a current-day neurologist, Donald Hoffman, saying exactly that. He does admit that there's *something* there when we turn our attention away from the moon, but it's not “the moon.” What it is, he doesn't know.

This undescribed reality is what Lenin and others, from a materialist perspective, considered objective reality to be. In Lenin's formulation, the sole determining characteristic of matter is that there is an objective reality apart from humans. As science develops it arrives at different descriptions of and equations about matter. Lenin's approach has received a lot of criticism. If you change the meaning of “matter,” you can make it whatever you like -- a criticism raised by linguistic expert Noam Chomsky.

From the perspective of materialist dialectics, Engels had opined that developments in atomic science exemplified the dialectical approach. As Marx and Engels felt that Darwin represented

their viewpoint in nature and biology, so the existence of the atomic realm was said to exemplify the dialectical materialist approach (although Marx never used that term).

As the theories of quantum physics advanced in the early 20<sup>th</sup> century, physicists voiced varying opinions about just what this strange theory meant. A later physicist, Richard Feynman, said that if you think you understand quantum physics, you don't. And one N. David Mermin put it bluntly, "Just shut up and calculate". (Often attributed to Feynman, but Mermin claimed he was the first to say it.)

As we will see below, Einstein himself showed considerable resistance to quantum physics.

**Niels Bohr**, *Discussions with Einstein on Epistemological Problems in Atomic Physics* (1949)

<https://www.marxists.org/reference/subject/philosophy/works/dk/bohr.htm>

Bohr recounts the development of quantum mechanics in the early decades of the twentieth century and remarks:

...quantum theory presents us with a novel situation in physical science, but attention was called to the very close analogy with the situation as regards analysis and synthesis of experience, which we meet in many other fields of human knowledge and interest. As is well known, many of the difficulties in psychology originate in the different placing of the separation lines between object and subject in the analysis of various aspects of psychical experience. Actually, words like "thoughts" and "sentiments," equally indispensable to illustrate the variety and scope of conscious life, are used in a similar complementary way as are space-time co-ordination and dynamical conservation laws in atomic physics.

A precise formulation of such analogies involves, of course, intricacies of terminology, and the writer's position is perhaps best indicated in a passage in the article, hinting at the mutually exclusive relationship which will always exist between the practical use of any word and attempts at its strict definition...Not least through a new discussion with Einstein in Princeton in 1937, where we did not get beyond a humorous contest concerning which side Spinoza would have taken if he had lived to see the development of our days, I was strongly reminded of the importance of utmost caution in all questions of terminology and dialectics.

**Reply by Albert Einstein:**

<https://www.marxists.org/reference/subject/philosophy/works/ge/einstein.htm>

What does not satisfy me in that theory [statistical quantum theory], from the standpoint of principle, is its attitude towards that which appears to me to be the programmatic aim of all physics: the complete description of any (individual) real situation (as it supposedly exists irrespective of any act of observation or substantiation). Whenever the positivistically inclined modern physicist hears such a formulation his reaction is that of a pitying smile. He says to himself: "there we have the naked formulation of a metaphysical prejudice, empty of content, a prejudice, moreover, the conquest of which constitutes the major epistemological achievement of physicists within the last quarter-century. Has any man ever perceived a 'real physical situation'? How is it possible that a reasonable person could today still believe that he can refute our essential knowledge and understanding by drawing up such a bloodless ghost?"

...What I dislike in this kind of argumentation is the basic positivistic attitude, which from my point of view is untenable, and which seems to me to come to the same thing as Berkeley's principle, *esse est percipi* [to be is to be perceived]. "Being" is always something which is mentally constructed by us, that is, something which we freely posit (in the logical sense). The justification of such constructs does not lie in their derivation from what is given by the senses. Such a type of derivation (in the sense of logical deducibility) is nowhere to be had, not even in the domain of pre-scientific thinking. The justification of the constructs, which represent "reality" for us, lies alone in their quality of making intelligible what is sensorily given (the vague character of this expression is here forced upon me by my striving for brevity).

...For, in the macroscopic sphere it simply is considered certain that one must adhere to the program of a realistic description in space and time; whereas in the sphere of microscopic situations one is more readily inclined to give up, or at least to modify, this program.

This discussion was only to bring out the following. One arrives at very implausible theoretical conceptions, if one attempts to maintain the thesis that the statistical quantum theory is in principle capable of producing a complete description of an individual physical system. On the other hand, those difficulties of theoretical interpretation disappear, if one views the quantum-mechanical description as the description of ensembles of systems.

I reached this conclusion as the result of quite different types of considerations. I am convinced that everyone who will take the trouble to carry through such reflections conscientiously will find himself finally driven to this interpretation of quantum-theoretical description (the Psi-function is to be understood as the description not of a single system but of an ensemble of systems).

JK: In a book like this it should be noted that "psi" is a fundamental term in both quantum physics and parapsychology. There is no overlap in meaning.

Roughly stated the conclusion is this: Within the framework of statistical quantum theory there is no such thing as a complete description of the individual system. More cautiously it might be put as follows: The attempt to conceive the quantum-theoretical description as the complete description of the individual systems leads to unnatural theoretical interpretations, which become immediately unnecessary if one accepts the interpretation that the description refers to ensembles of systems and not to individual systems. In that case the whole "egg-walking" performed in order to avoid the "physically real" becomes superfluous.

...A few more remarks of a general nature concerning concepts and [also] concerning the insinuation that a concept -- for example that of the real -- is something metaphysical (and therefore to be rejected). A basic conceptual distinction, which is a necessary prerequisite of scientific and pre-scientific thinking, is the distinction between "sense-impressions" (and the recollection of such) on the one hand and mere ideas on the other. There is no such thing as a conceptual definition of this distinction (aside from, circular definitions, i.e., of such as make a hidden use of the object to be defined). Nor can it be maintained that at the base of this distinction there is a type of evidence, such as underlies, for example, the distinction between red and blue. Yet, one needs this distinction in order to be able to overcome solipsism. Solution: we shall make use of this distinction unconcerned with the reproach that, in doing so, we are guilty of the metaphysical "original sin."

We regard the distinction as a category which we use in order that we might the better find our way in the world of immediate sensations. The "sense" and the justification of this distinction lies simply in this achievement. But this is only a first step.

We represent the sense-impressions as conditioned by an "objective" and by a "subjective" factor. For this conceptual distinction there also is no logical-philosophical justification. But if we reject it, we cannot escape solipsism. It is also the presupposition of every kind of physical thinking. Here too, the only justification lies in its usefulness. We are here concerned with "categories" or schemes of thought, the selection of which is, in principle, entirely open to us and whose qualification can only be judged by the degree to which its use contributes to making the totality of the contents of consciousness "intelligible." The above mentioned "objective factor" is the totality of such concepts and conceptual relations as are thought of as independent of experience, viz., of perceptions. So long as we move within the thus programmatically fixed sphere of thought we are thinking physically. Insofar as physical thinking justifies itself, in the more than once indicated sense, by its ability to grasp experiences intellectually, we regard it as "knowledge of the real."

After what has been said, the "real" in physics is to be taken as a type of program, to which we are, however, not forced to cling *a priori*. No one is likely to be inclined to attempt to give up this program within the realm of the "macroscopic" (location of the mark on the paper strip "real"). But the "macroscopic" and the "microscopic" are so inter-related that it appears impracticable to give up this program in the "microscopic" alone. Nor can I see any occasion anywhere within the observable facts of the quantum-field for doing so, unless, indeed, one clings *a priori* to the thesis that the description of nature by the statistical scheme of quantum-mechanics is final.

The theoretical attitude here advocated is distinct from that of Kant only by the fact that we do not conceive of the "categories" as unalterable (conditioned by the nature of the understanding) but as (in the logical sense) free conventions. They appear to be *a priori* only insofar as thinking without the positing of categories and of concepts in general would be as impossible as is breathing in a vacuum.

From these meagre remarks one will see that to me it must seem a mistake to permit theoretical description to be directly dependent upon acts of empirical assertions, as it seems to me to be intended [for example] in Bohr's principle of complementarity, the sharp formulation of which, moreover, I have been unable to achieve despite much effort which I have expended on it. From my point of view [such] statements or measurements can occur only as special instances, viz., parts, of physical description, to which I cannot ascribe any exceptional position above the rest.

...Newton's theory deserves the name of a classical theory. It has nevertheless been abandoned since Maxwell and Hertz have shown that the idea of forces at a distance has to be relinquished and that one cannot manage without the idea of continuous "fields." The opinion that continuous fields are to be viewed as the only acceptable basic concepts, which must also be assumed to underlie the theory of the material particles, soon won out. Now this conception became, so to speak, "classical"; but a proper, and in principle complete, *theory* has not grown out of it. Maxwell's theory of the electric field remained a torso, because it was unable to set up laws for the behaviour of electric density, without which there can, of course, be no such thing as an electro-

magnetic field. Analogously the general theory of relativity furnished then a field theory of gravitation, but no theory of the field-creating masses. (These remarks presuppose it as self-evident that a field-theory may not contain any singularities, i.e., any positions or parts in space in which the field laws are not valid.)

...I close these expositions, which have grown rather lengthy, concerning the interpretation of quantum theory with the reproduction of a brief conversation which I had with an important theoretical physicist. He: "I am inclined to believe in telepathy." I: "This has probably more to do with physics than with psychology." He: "Yes."

...The scientist, however, cannot afford to carry his striving for epistemological systematic that far. He accepts gratefully the epistemological conceptual analysis; but the external conditions, which are set for him by the facts of experience, do not permit him to let himself be too much restricted in the construction of his conceptual world by the adherence to an epistemological system. He therefore must appear to the systematic epistemologist as a type of unscrupulous opportunist: he appears as *realist* insofar as he seeks to describe a world independent of the acts of perception; as *idealist* insofar as he looks upon the concepts and theories as the free inventions of the human spirit (not logically derivable from what is empirically given); as *positivist* insofar as he considers his concepts and theories justified only to the extent to which they furnish a logical representation of relations among sensory experiences. He may even appear as *Platonist* or *Pythagorean* insofar as he considers the viewpoint of logical simplicity as an indispensable and effective tool of his research.

[End Einstein]

JK: One of the main concerns of Marxists, physicists and others was that positivists were taking an idealist view of basic reality. Positivists held that basic reality was either a realm of ideas or the realm of God (and they quoted prominent scientists Arthur Eddington and James Jeans in support) or they held that we just can't know. They were unwilling to say: Hey, it's a fact that the moon, the stars and the planets existed long before humans did -- which materialists are quite willing to say.

Now when we see estimates of a single galaxy (Andromeda) containing over a trillion stars and the existence of many billions or even trillions of galaxies, the sheer magnitude of the universe might render those positivist views, to some of us at any rate, unlikely and perhaps even laughable. I do not say there is a logical connection -- it's that the sheer immensity of the physical universe might lead us to this perspective -- and to reject the contention that "Consciousness is the fundamental."

Let's look now at the views of a few additional physicists, some of whom held that dialectics fits in with quantum mechanics and others who disagreed.

**Max Born** and **Léon Rosenfeld** had contrasting viewpoints.

Biographical sketches at [https://en.wikipedia.org/wiki/Max\\_Born](https://en.wikipedia.org/wiki/Max_Born) and [https://en.wikipedia.org/wiki/L%C3%A9on\\_Rosenfeld](https://en.wikipedia.org/wiki/L%C3%A9on_Rosenfeld)

**Freire, Olival and Lehner, Christoph**, *Dialectical Materialism and Modern Physics, an Unpublished Text By Max Born*

[https://www.researchgate.net/publication/250902668\\_Dialectical\\_materialism\\_and\\_modern\\_physics](https://www.researchgate.net/publication/250902668_Dialectical_materialism_and_modern_physics) 'An unpublished text by Max Born

Born could not accept Rosenfeld's claims:

Our attitudes to some of the fundamental questions of physics are very similar—though not identical. The main difference is that you claim complementarity has something to do with 'dialectical materialism.' This I most emphatically deny.

JK: Born does go on to analyze the dialectics of Hegel and denies it applies to quantum mechanics, if it is even coherent.

Born:

It is therefore perfectly clear that Marx's and Engels' doctrine is not based on historical facts. It is a metaphysical assumption, and obviously due to wishful thinking. They desired to justify sociological ideas by pretending they are based on scientific methods and share the reliability of these. The elementary paradigm of the sociological situation is this: There is one piece of bread, which Jonathan and Boris want to have. There are three possibilities: (1) Jonathan takes it (thesis), or (2) Boris takes it (antithesis); (3) after some fight they divide it in two parts and each takes half of it (synthesis).

JK: Born is misinformed about Marx & Engels' views. His example of the supposed dialectics, probably offered tongue in cheek, is of course quite inaccurate.

Born:

The materialistic doctrine regards the latter as the rule of the condition of progress. I cannot see that this is justified by history; it has happened that Boris got the whole spoil, in other cases Jonathan got it. Nor can I see that it agrees with the communist doctrine that in the struggle between capitalism (thesis) and communism (antithesis) the latter will be victorious and annihilate the former which appears a strange interpretation of synthesis. But all this is not our business here, which concerns only the question whether science conforms to the Hegelian–Marxistic doctrine. This is certainly not the case. Up to the time when it was announced no example can be produced. The only example of the synthesis of contesting theories happened almost a hundred years after Marx and Engels, in Quantum Mechanics. Thus their doctrine might be regarded as a marvelous example of forecast and prophecy. But then it is not science but a feat of super-metaphysical divining short of a miracle.

Quantum mechanics had to acknowledge the fact that radiation phenomena behaved under certain experimental conditions as if they were due to particles, under other conditions as if they were due to waves. It succeeded in reconciling these two apparently contradicting theories by a truly astonishing synthesis. For this purpose a revision of the ideas about physical reality was necessary, and the traditional concept of determinism in physical laws had to be abandoned and replaced by a statistical interpretation of these laws. A critical revision of the empirical base of the fundamental

ideas of particles and waves led Bohr to the complete elucidation of the situation, formulated in his principle of complementarity.

...The fact is, that no science is possible without some general assumptions which are not logically derivable from scientific methods and in this sense metaphysical. These assumptions are not invariable but have to be adapted to the temporary empirical situation; though they are not logically *derivable* from facts they are nevertheless reasonable, which means that an unbiased mind knowing all the observed facts will feel compelled to agree to them. If this is metaphysics, it is good metaphysics. But the doctrine of dialectical materialism is bad metaphysics as it introduces associations with antiquated concepts which are not only unnecessary but misleading. Whether the dialectical doctrine has a legitimate field of application in biology and in human affairs shall not be discussed here. Living organisms are struggling and fighting, and it might be possible to interpret the (th.—a.—s.)[thesis-antithesis-synthesis] dogma in a reasonable way. But then it appears to me as a triviality.

...The thermodynamical transitions by Engels and Stalin, used as physical analogies for such events, can just as well, even with greater plausibility, be used for the opposite conclusion. For van der Waals theoretical investigations on the transition of liquid → gas, which have been confirmed by numerous experiments, show that by properly directing the changes of temperature and pressure the transition can be performed in a continuous way without a sudden (qualitative) change and without the appearance of a dividing surface (meniscus). The analogy in the social structure of states would be something like the slow introduction of socialism without a violent revolution, as it happened in Great Britain.

[End Born]

**Jacobsen, Anja Skaar**, *Léon Rosenfeld's Marxist defense of complementarity* (2012)

That Rosenfeld professed Marxism is evident from his papers and correspondence and was often mentioned by his colleagues, for example, by Pauli, who once ironically addressed him “Dear  $\surd(\text{TrotskyBohr}^2 = \text{Rosenfeld})!$ ”

page 9 in text

What is striking is that Rosenfeld did not mention Vladimir I. Lenin's notorious book, *Materialism and empirio-criticism*, originally published in Russian in 1908 and translated into English and German in 1927. Alongside Engels' *Anti-Dühring* and *Dialektik der Natur*, published posthumously in 1925, Lenin's book was the most influential publication in the early years of the Soviet Union as well as among most Marxist scientists and intellectuals in the West. In 1953, Rosenfeld characterized Lenin's book in the following way: “Lenin, while no doubt intending to follow Engels, in effect advocated mechanistic materialism, with its metaphysical conception of determinism.” Rosenfeld blamed this book and Joseph Stalin's pamphlet *Über dialektischen und historischen Materialismus* (1938), which Rosenfeld simply dismissed as “Stalinist rubbish,” for the “prevailing muddle between mechanistic and scientific materialism” in the 1950s, which resulted in severe criticism of the Copenhagen Interpretation in this period.

Rosenfeld subscribed to the criticism of Lenin's thought conveyed by his Dutch friend, the “very distinguished astronomer” and “socialist militant of the old guard” Anton Pannekoek. Pannekoek's and Rosenfeld's philosophical disagreements with Lenin concerned the form of materialism that

Lenin advocated and his position against Ernst Mach in *Materialism and empirio-criticism*. To Rosenfeld and Pannekoek, Lenin's materialism was not properly dialectical, but mechanistic or bourgeois, akin to the naive and reductionist mechanical materialism of the middle class of the 19th century. Lenin's book was a reaction in part to the attempt by some Russian Marxists, such as Alexander A. Bogdanov, to combine Marxism with Mach's empirio-criticism. Mach held that we can only achieve knowledge about matter by means of sense impressions, i.e., we cannot have any knowledge about the objective existence of matter. Lenin, on the other hand, claimed that it was possible through sense experience and the intellectual activities derived from it to obtain absolute knowledge of physical reality, which he identified with physical matter. Rosenfeld agreed with Mach to the extent that we only know reality through our senses; scientific epistemology is grounded in and determined by the material, empirical world. Nature, or the surrounding world, is for the scientist the objectively given reality, which he observes and affects him through his senses.

For Pannekoek and Rosenfeld, the concept of physical matter did not suffice to explain the experienced world, and concepts like mind and consciousness were needed, too. In accordance with his interpretation of Engels' materialism, Rosenfeld conceived of mind as the receiver of sense perceptions of the active surrounding world. Mind, therefore, somehow both perceives and reflects reality. He understood materialism to mean that "thought [is] a product of the development of the organic being gradually adapting itself to experience." The creation of ideas and concepts was in this sense in itself a dialectical process.

p11 With Bernal, however, Rosenfeld entered into a dispute in 1956 about Bernal's book *Science in History* (1954). The dispute concerned Marxism, historical materialism, and, to a certain extent, Bohr's interpretation of quantum mechanics. Rosenfeld's friendship with some of the Russian physicists, primarily Igor E. Tamm, seems to stem from his stay in Gottingen in 1928. A few letters were exchanged between Rosenfeld and Vladimir A. Fock in 1956 and 1959/60.

p12 [Rosenfeld wrote:]

[I]t must be realised that it is impossible in principle to write a text-book about dialectics, since this would be to fix a mode of thought which is essentially flowing. It is exactly the same with complementarity (which is the modern form of dialectics): you cannot give a "definition" of it, but only understand what it is by *re-thinking for yourself* the typical cases in which it occurs.

p13 Thus, to Rosenfeld, complementarity was simply another expression of a dialectical relation. Accordingly, Bohr's idea of mutually exclusive aspects was turned into "contradictive," or "antagonistic," aspects in Rosenfeld's terms. In quantum mechanics, complementarity was the dialectical synthesis of the contradictory wave and particle aspects of light and matter, for instance, the totality is neither the former picture nor the latter, but the synthesis of both. In this way, nature on the atomic level displayed dialectical behavior and therefore required a *dialectical description*, and that, according to Rosenfeld, defines complementarity.

Another lesson to be drawn from quantum mechanics, in Rosenfeld's view, which harmonized well with his interpretation of dialectical materialism, and was in sharp contrast to mechanistic materialism was that:



analysis of the conditions of rational description of the phenomena has consequences which go far beyond the realm of physics, they affect our whole attitude toward the function of science. We now recognize that the task of science is not to picture the world as a spectacle watched “from outside,” . . . but rather to give us the means of communicating, in a rational and objective way, the experience derived from our interaction with the world around us, of which we ourselves are a part. It is clear that this relationship between the material universe and the human mind transcends the antiquated opposition of materialism and idealism, but could rather be described as a synthesis of these mutually exclusive points of view, in the sense of complementarity.

p14 Heisenberg, too, expressed the epistemological consequences of quantum theory somewhat differently from Rosenfeld. According to Heisenberg:

The atomic physicist has had to resign himself to the fact that his science is but a link in the infinite chain of man’s argument with nature, *and that it cannot simply speak of nature “in itself”* . . . As Bohr has said, we must become conscious of the fact that we are not merely observers but also actors on the stage of life.

With this much Rosenfeld could agree. However, to Heisenberg the above implied that

the natural laws formulated mathematically in quantum theory no longer deal with the elementary particles themselves but with our knowledge about them. Nor is it any longer possible to ask whether or not these particles exist in space and time objectively, since the only processes we can refer to as taking place are those which represent the interplay of particles with some other physical system, e.g., a measuring instrument. Thus, the objective reality of the elementary particles has been strangely dispersed, not into the fog of some new ill-defined or still unexplained conception of reality, but into the transparent clarity of a mathematics that no longer describes the behavior of the elementary particles but only our knowledge of this behavior.

Heisenberg’s position thus appeared to be idealistic not only with regard to epistemology but even with respect to ontology, and he held that ideas originated in mathematics, not in “objective reality,” and not in the material world. Rosenfeld strongly disagreed with Heisenberg’s idealism as presented here and would stress that “mathematical concepts are also human inventions and accordingly bear the mark of their material origin.” As for objective reality, Rosenfeld would vexatiously burst out at Marxist colleagues who accused him of positivism that “of course there are atoms . . . it is impossible to understand it [quantum mechanics] without assuming that there is an external world which is independent of what we think and which is the ultimate origin of all our ideas.” Bohr may have cast doubt on our theories’ ability to capture the whole reality, but not that the entities we are trying to describe exist.

p15 In close connection with his historiographical view of the dialectical development of quantum theory, Rosenfeld considered Niels Bohr a prime example of a dialectical thinker. According to

Rosenfeld, Bohr was eminently skilled in solving contemporary crises and conflicts in physics by integrating new contradictory aspects into a rational synthesis, thereby achieving order and coherence. Bohr displayed this skill, for instance, in developing his quantum theory of atomic structure, published in 1913, as a solution to the acute dilemma brought about by Ernest Rutherford's atomic model. Classical physics could not account for the stability of such atoms since it predicted that electrons emit electromagnetic radiation, with the result that they should fall into the nucleus. This contradiction between experience of stable atoms and the available theory made Bohr introduce his quantum description of atomic structure and hence overcome or supersede the contradiction between experience and theory. Another example of Bohr's dialectical approach, according to Rosenfeld, was his introduction of complementarity as a new form of causal description of the contradictory wave and particle properties of matter and light.

p 17 Other than Rosenfeld, only a small number of Marxist physicists held that complementarity was compatible with Marxist philosophy, most notably the Soviet physicist Vladimir A. Fock. Fock came to believe, and apparently independently of Rosenfeld, that Bohr was a dialectician, and found correspondence between dialectics and complementarity. However, this still left Rosenfeld's views on dialectical materialism and complementarity rather marginal among Marxist physicists.

Like other Marxists, Rosenfeld saw in the history of science and in contemporary science an ongoing struggle between the materialist and idealist camps. He was strongly committed to refuting idealistic viewpoints in science. In his inaugural lecture of 1942 in Utrecht, he expressed particular concern about the "error of those who believe that they have found in complementarity the penetration of irrational or extra-rational tendencies into the very citadel of determinism." Here Rosenfeld may very well have hinted at Pascual Jordan's writings about complementarity and parapsychology from the 1930s.

[JK: The following quote refers to physicist David Bohm's theories of the quantum world. Bohm's views will be presented shortly.]

p 22 The aim of Bohm's interpretation was to reintroduce classical causality and determinism into the description of quantum phenomena and suggest a "more complete" description dealing with a deeper level of reality than did the Copenhagen Interpretation. In order to achieve this goal he introduced so-called hidden parameters. Bohm's ideas did not find many adherents, but his theory or interpretation was celebrated by a small group of physicists in France, including Louis de Broglie, Jean-Pierre Vigier, and Evry Léon Schatzman. De Broglie, who had been interested in similar hidden variables ideas earlier in the century, took up this approach again after Bohm's work. The fact that Bohm was a Marxist was to some extent significant both in determining who supported his approach and where he expected support. With the notable exception of de Broglie, the group around him and Vigier in France were strongly motivated in their work on the causal program by Marxist thought.

Rosenfeld expressed great annoyance with the new attempts to find other descriptions of quantum phenomena; for one thing, these new approaches were not grounded in new empirical findings. But Rosenfeld was also deeply distressed because the younger generation did not turn to the original sources when studying these issues. In particular, he found that they did not understand

Bohr's ideas properly. As for Marxist criticisms, as mentioned above, Rosenfeld blamed the renewed interest in Lenin's old book *Materialism and empirio-criticism* and Stalinism for the "prevailing muddle between mechanistic and scientific materialism," which to Rosenfeld constituted the heart of the matter in Marxist opponents' criticism of the Copenhagen Interpretation. Thus he found troubling that what he saw as idealist approaches in quantum physics, such as Schrödinger's, would also find support among Soviet physicists such as Iakov Frenkel and Blokhintsev, "who profess to derive their inspiration from a 'materialistic' philosophy." According to Rosenfeld, Frenkel was not a dialectical materialist in Engels's sense, but advocated Lenin's mechanistic, deterministic, and reductionistic materialism.

p 25 Joliot-Curie appears not to have been much interested in the philosophical subtleties of quantum physics, but from his reply he seems to have agreed completely with Rosenfeld in his critique of those youngsters and on the need to take action.

p 26 In the end, Rosenfeld seems not to have succeeded in straightening up the communist physicists. In a letter to Martin Strauss in 1953, he complained, "Indeed, I have had animated discussions about this matter, first with the Paris group of communist physicists, then with the London group around Bernal, without succeeding at convincing them that the true dialectics is expressed through complementarity, and that determinism represents an outdated metaphysical idea."

p 28 Rosenfeld's campaign met with opposition not only from Marxists critical of complementarity but also from the founders of quantum mechanics. Indeed, Rosenfeld ended his "Strife" paper, "I seem to quarrel with everybody." Surely Pauli, Born, and Heisenberg did not like that the Copenhagen Interpretation was criticized from the perspective of Marxism, but neither did they agree with Rosenfeld's mixture of Marxism with complementarity. Pauli and Born also expressed their distaste for Rosenfeld's criticism of Heisenberg's idealism. Heisenberg for his part did not conceal his idealistic views but expressed them quite openly, just as he was quite open to discussing philosophical matters with Rosenfeld. However, it is not clear if a dialogue ever took place.

p 29 Bohr asked Rosenfeld, [and] he reported:

"Why are those Russians dissatisfied?" And I tried to explain, "They accuse you of being a positivist," and so on. Then he said, "Is that it? But those things are so trivial; they are not of interest to physicists. Physicists are beyond that point and that is not the thing that we are interested in. We are struggling with real problems, not with those trivial statements about our living in an external world."

p 33 Given Rosenfeld's Marxist views and his Marxist campaign for complementarity, it may seem rather surprising that several of his colleagues ignored or were even unaware of his Marxist position. However, Rosenfeld was not a militant Marxist or activist like Pannekoek, Bernal, or Joliot-Curie, but mainly a philosophically oriented Marxist. Closely connected with this, he distanced himself clearly from Leninist Marxism and the communists, typically identified as the Marxists. Moreover, Rosenfeld never bothered or managed to publish a longer, more thorough exposition of his Marxist position on a par with Pannekoek's *Lenin as philosopher* or Bernal's

*Science in history*. In his publications, Rosenfeld presumed that his readers were well-acquainted with the vocabulary and lines of thought in Marxism, which, however, was probably rarely the case as he was mainly addressing a general physics audience. Thus, since the majority of obituaries and shorter biographies by his colleagues and friends do not mention this side of him, it seems that these people were probably unable to understand his references to Marxism and therefore did not appreciate or recognize them. In addition, Rosenfeld seems not to have been very outspoken about Marxism beginning around the time he took a position in Copenhagen. Consequently, it was more or less unknown that he was a Marxist among his Danish colleagues of that time.

Jacobsen:

For the early Russian context of debates about Marxist philosophy and science, see **Paul R. Josephson**, *Physics and politics in revolutionary Russia* (Berkeley, 1991), 204, 226, 249.

## David Bohm

Wikipedia

[https://en.wikipedia.org/wiki/David\\_Bohm](https://en.wikipedia.org/wiki/David_Bohm)

**David Joseph Bohm** (20 December 1917–27 October 1992) was an American–Brazilian–British scientist who has been described as one of the most significant [theoretical physicists](#) of the 20th century and who contributed unorthodox ideas to [quantum theory](#), [neuropsychology](#) and the [philosophy of mind](#). Among his many contributions to physics is his causal and deterministic interpretation of quantum theory known as [De Broglie–Bohm theory](#).

Bohm advanced the view that quantum physics meant that the old [Cartesian model](#) of reality—that there are two kinds of substance, the mental and the physical, that somehow interact—was too limited. To complement it, he developed a mathematical and physical theory of ["implicate" and "explicate" order](#). He also believed that the brain, at the cellular level, works according to the mathematics of some quantum effects, and postulated that thought is distributed and non-localised just as quantum entities are. Bohm's main concern was with understanding the nature of reality in general and of consciousness in particular as a coherent whole, which according to Bohm is never static or complete.

Bohm warned of the dangers of rampant reason and technology, advocating instead the need for genuine supportive dialogue, which he claimed could bridge and unify conflicting and troublesome divisions in the social world. In this, his [epistemology](#) mirrored his [ontology](#).

Born in the United States, Bohm obtained his Ph.D. under [J. Robert Oppenheimer](#) at the [University of California, Berkeley](#). Due to his [Communist](#) affiliations, he was the subject of a federal government investigation in 1949, prompting him to leave the U.S. He pursued his career in several countries, becoming first a [Brazilian](#) and then a [British citizen](#). He abandoned Marxism in the wake of the [Hungarian Uprising](#) in 1956.

JK: First, brief appraisals of Bohm and his work, then Bohm's views in his own words.

**Forstner, Christian**, *Dialectical Materialism and the Construction of a New Quantum Theory: David Joseph Bohm, 1917–1992* (2005)

page 1 in text

Bohm's worldview, based on dialectical materialism, contributed substantially to the construction of new physical entities in his theory and led him to work intensively on the philosophy of science. His example shows that the ideology and political attitude of a physicist can play a major role in the construction of scientific theories and entities, with the important reservation that a change in social context was the necessary impulse for Bohm's work.

p2 In Bohm's view, the observer's consciousness is the determining and decisive factor in the standard interpretation, not the properties of matter. In this way Bohm understood it as idealistic. In Bohm's interpretation, however, the particle possesses at all times a well-defined position and momentum regardless of observation or associating ideas. So, in Bohm's view, matter came before mind in his theory. Thus he called his interpretation a materialistic one. With this materialist interpretation, Bohm wanted to expel mysticism from physics. He also believed that scientific theories change in the long run people's thinking about society.

p6 [quoting Bohm:]

The most important new concept to which we are led is that any given piece of matter (for instance, an electron) is not completely identical with either a particle or a wave, but that, instead, it is something potentially capable of developing either one of these aspects of its behaviour at the expense of the other. Which of the electron's opposing potentialities will actually be realized in a given case depends as much on the nature of the systems with which the electron interacts as on the electron itself. Because the electron interacts continually with many different kinds of systems, each of which develops different potentialities, the electron will undergo continual transformations between its different possible forms of behaviour (i.e., wave or particle).

[After Bohm completed his textbook on Quantum Mechanics, he sought a new theory.]

p7 In David Bohm's interpretation, the wave function gets a real physical meaning. It becomes a kind of pilot wave, which guides the particle on a trajectory that is fixed deterministically with given initial conditions. That is: if one knows the position and momentum of a particle at a certain time, one can predict the particle movement for all future times. Statistical statements are necessary only because of the observer's lack of knowledge and are no fundamental part of the theory.

p8 After Bohm had submitted the article to the *Physical Review* he started to reconsider his theory on the basis of the dialectical materialism. Bohm considered philosophy as a guideline for his physical research. To him, philosophy served the better as a heuristic for science the better it represented reality. To him dialectical materialism accomplished this best of all.

**Seager, William**, *The Philosophical and Scientific Metaphysics of David Bohm* (2018)

Abstract: Although David Bohm's interpretation of quantum mechanics is sometimes thought to be a kind of regression towards classical thinking, it is in fact an extremely radical metaphysics of

nature. The view goes far beyond the familiar but perennially peculiar non-locality and entanglement of quantum systems. In this paper, a philosophical exploration, I examine three core features of Bohm's metaphysical views, which have been both supported by features of quantum mechanics and integrated into a comprehensive system. These are the holistic nature of the world, the role of a unique kind of information as the ontological basis of the world, and the integration of mentality into this basis as an essential and irreducible aspect of it.

**Bohm, *A new theory of mind and matter* (1990)**

**ABSTRACT** The relationship of mind and matter is approached in a new way in this article. This approach is based on the causal interpretation of the quantum theory, in which an electron, for example, is regarded as an inseparable union of a particle and a field. This field has, however, some new properties that can be seen to be the main sources of the differences between the quantum theory and the classical (Newtonian) theory. These new properties suggest that the field may be regarded as containing objective and active information, and that the activity of this information is similar in certain key ways to the activity of information in our ordinary subjective experience. The analogy between mind and matter is thus fairly close. This analogy leads to the proposal of the general outlines of a new theory of mind, matter, and their relationship, in which the basic notion is participation rather than interaction. Although the theory can be developed mathematically in more detail, the main emphasis here is to show qualitatively how it provides a way of thinking that does not divide mind from matter, and thus leads to a more coherent understanding of such questions than is possible in the common dualistic and reductionistic approaches. These ideas may be relevant to connectionist theories and might perhaps suggest new directions for their development.

p 271 in text

However, as will be explained in more detail later, the quantum theory, which is now basic, implies that the particles of physics have certain primitive mind-like qualities which are not possible in terms of Newtonian concepts (though, of course, they do not have consciousness). This means that on the basis of modern physics even *inanimate* matter cannot be fully understood in terms of Descartes's notion that it is nothing but a substance occupying space and constituted of separate objects. Vice versa, it will be argued that mind can be seen to have always a physical aspect, though this may be very subtle. Thus, we are led to the possibility of a real relationship between the two, because they never have the absolute distinction of basic qualities, that was assumed by Descartes and by others, such as the emergent materialists.

The way is thus now opened to see the possible relevance of physics in this context. This is because the quantum theory *denies* the mechanistic (Newtonian) conceptual framework which has thus far implicitly justified the notion that mind is of such a nature that it can have absolutely nothing to do with the laws of matter. Moreover, though those new qualities of matter have been established at the fundamental level of particle physics, we shall indicate in a later section how it may be possible for them to become operative at higher levels of organization such as that of brain and nervous system.

The implicate order and the quantum theory

The question of the relationship of mind and matter has already been explored to some extent in some of my earlier work in physics (Bohm, 1980). In this work, which was originally aimed at

understanding relativity and quantum theory on a basis common to both, I developed the notion of the enfolded or implicate order. The essential feature of this idea was that the whole universe is in some way enfolded in everything and that each thing is enfolded in the whole. From this it follows that in some way, and to some degree everything enfolds or implicates everything, but in such a manner that under typical conditions of ordinary experience, there is a great deal of *relative* independence of things. The basic proposal is then that this enfoldment relationship is not merely passive or superficial. Rather, it is active and essential to what each thing is. It follows that each thing is internally related to the whole, and therefore, to everything else. The external relationships are then displayed in the unfolded or explicate order in which each thing is seen, as has already indeed been indicated, as relatively separate and extended, and related only externally to other things. The explicate order, which dominates ordinary experience as well as classical (Newtonian) physics, thus appears to stand by itself. But actually, it cannot be understood properly apart from its ground in the primary reality of the implicate order.

Because the implicate order is not static but basically dynamic in nature, in a constant process of change and development, I called its most general form the *holomovement*. All things found in the unfolded, explicate order emerge from the holomovement in which they are enfolded as potentialities and ultimately they fall back into it. They endure only for some time, and while they last, their existence is sustained in a constant process of unfoldment and re-enfoldment, which gives rise to their relatively stable and independent forms in the explicate order.

p274 Thirdly, there is a strange new property of non-locality. That is to say, under certain conditions, particles that are at macroscopic orders of distance from each other appear to be able, in some sense, to affect each other, even though there is no known means by which they could be connected. Indeed if we were to assume any kind of force whatsoever (perhaps as yet unknown) to explain this connection, then the well-known Bell's theorem gives a precise and general criterion for deciding whether the connection is local, i.e. one brought about by forces that act when the systems are not in constant (Bell, 1966). It can be shown that the quantum theory implies that Bell's criterion is violated, and this implication is confirmed by the actual experiments. Therefore, it follows that if there are such forces, they must act non-locally. Such non-local interactions are basically foreign to the general conceptual scheme of classical (Newtonian) physics, as it has been known over the past few centuries (which states that interactions are either in contact or carried by locally acting fields that propagate continuously through space).

All of this can be summed up in terms of a new notion of quantum wholeness, which implies that the world cannot be analyzed into independently and separately existent parts. This sort of analysis will have at most an approximate and limited kind of applicability; i.e. in a domain in which Newtonian physics is approximately valid. But fundamentally, quantum wholeness is what is primary.

p281 If the basic behaviour of matter involves such features as wholeness, non-locality and organisation of movement through common pools of information, how then do we account for ordinary large scale experience, in which we find no such features? It can be shown (Bohm & Hiley, 1987) that at higher temperatures, the quantum potential tends to take the form of independent parts, which implies that the particles move with a corresponding independence. It is as if, instead of engaging in a ballet dance, people were moving independently, each with his own

separate pool of information. They would then constitute a crowd, in which the organized movement of the ballet has broken up.

#### Implications for mind

It follows from the above that the possibilities for wholeness in the quantum theory have an objective significance. This is in contrast to what happens in classical physics, which must treat a whole as merely a convenient way of thinking about what is considered to be in reality nothing but a collection of independent parts in a mechanical kind of interaction. On the other hand, in the quantum theory, the 'ballet-like' behaviour in superconductivity, for example, is clearly more like that of an organism than like that of mechanism. Indeed, going further, the whole notion of active information suggests a rudimentary mind-like behaviour of matter, for an essential quality of mind is just the activity of form, rather than of substance. Thus, for example, when we read a printed page, we do not assimilate the substance of the paper, but only the forms of the letters, and it is these forms which give rise to an information content in the reader which is manifested actively in his or her subsequent activities. A similar mind-like quality of matter reveals itself strongly at the quantum level, in the sense that the form of the wave function manifests itself in the movements of the particles. This quality does not, however, appear to a significant extent at the level at which classical physics is a valid approximation.

Let us now approach the question from the side of mind. We may begin by considering briefly some aspects of the nature of thought. Now, a major part of the significance of thought is just the activity to which a given structure of information may give rise. We may easily verify this in our subjective experience. For example, suppose that on a dark night, we encounter some shadows. If we have information that there may be assailants in the neighbourhood, this may give rise immediately to a sense of danger, with a whole range of possible activities (fight, flight, etc.). This is not merely a mental process, but includes an involuntary and essentially unconscious process of hormones, heart-beat, and neurochemicals of various kinds, as well as physical tensions and movements. However, if we look again see that it is only a shadow that confronts us, this thought has a calming effect, and all the activity described above ceases. Such a response to information is extremely common (e.g. information that X is a friend or an enemy, good or bad, etc.). More generally, with mind, information is thus seen to be active in all these ways, physically, chemically, electrically, etc.

Such activity is evidently similar to that which was described in connection with automatic pilots, radios, computers, DNA, and quantum processes in elementary particles such as electrons. At first sight, however, there may still seem to be a significant difference between these two cases. Thus, in our subjective experience action can, in some cases at least, be mediated by reflection in conscious thought, whereas in the various examples of activity of objective information given here, this action is immediate. But actually, even if this happens, the difference is not as great as might appear. For such reflection follows on the suspension of physical action. This gives rise to a train of thought. However, both the suspension of physical action and the resulting train of thought follow immediately from a further kind of active information implying the need to do this.

It seems clear from all this that at least in the context of the processes of thought, there is a kind of active information that is simultaneously physical and mental in nature. Active information can thus serve as a kind of link or 'bridge' between these two sides of reality as a whole. These two



sides are inseparable, in the sense that information contained in thought, which we feel to be on the 'mental' side, is at the same time a related neurophysiological, chemical, and physical activity (which is clearly what is meant by the 'material' side of this thought).

p282 We have however up to this point considered only a small part of the significance of thought. Thus, our thoughts may contain a whole range of information content of different kinds. This may in turn be surveyed by a higher level of mental activity, as if it were a material object at which one were 'looking'. Out of this may emerge a yet more subtle level of information, whose meaning is an activity that is able to organize the original set of information into a greater whole. But even more subtle information of this kind can, in turn, be surveyed by a yet more subtle level of mental activity, and at least in principle this can go on indefinitely. Each of these levels may then be seen from the material side. From the mental side, it is a potentially active information content. But from the material side, it is an actual activity that operates to organize the less subtle levels, and the latter serve as the 'material' on which such operation takes place. Thus, at each level, information is the link or bridge between the two sides.

The proposal is then that a similar relationship holds at indefinitely great levels of subtlety. I am suggesting that this possibility of going beyond any specifiable level of subtlety is the essential feature on which the possibility of intelligence is based.

**Bohm, *Wholeness and the implicate order* (1980)**

page 4 in text

The relationship between thought and reality that this thought is about is in fact far more complex than that of a mere correspondence.

p5 If we supposed that theories gave true knowledge, corresponding to 'reality as it is', then we would have to conclude that Newtonian theory was true until around 1900, after which it suddenly became false, while relativity and quantum theory suddenly became the truth. Such an absurd conclusion does not arise, however, if we say that all theories are insights, which are neither true nor false but, rather, clear in certain domains, and unclear when extended beyond these domains.

p6 So, instead of supposing that older theories are falsified at a certain point in time, we merely say that man is continually developing new forms of insight, which are clear up to a point and then tend to become unclear. In this activity, there is evidently no reason to suppose that there is or will be a final form of insight (corresponding to absolute truth) or even a steady series of approximations to this. Rather, in the nature of the case, one may expect the unending development of new forms of insight (which will, however, assimilate certain key features of the older forms as simplifications, in the way that relativity theory does with Newtonian theory). As pointed out earlier, however, this means that our theories are to be regarded primarily as ways of looking at the world as a whole (i.e. world views) rather than as 'absolutely true knowledge of how things are' (or as a steady approach toward the latter).

p9 It is clear that we may have any number of different kinds of insights. What is called for is not an *integration* of thought, or a wholeness and the implicate order kind of imposed unity, for any such imposed point of view would itself be merely another fragment. Rather, all our different ways of thinking are to be considered as different ways of looking at the one reality, each with some

domain in which it is clear and adequate. One may indeed compare a theory to a particular view of some object. Each view gives only an appearance of the object in some aspect. The whole object is not perceived in any one view but, rather, it is grasped only implicitly as that single reality which is shown in all these views. When we deeply understand that our theories also work in this way, then we will not fall into the habit of seeing reality and acting toward it as if it were constituted of separately existent fragments corresponding to how it appears in our thought and in our imagination when we take our theories to be ‘direct descriptions of reality as it is’.

p12 Thus, one can no longer maintain the division between the observer and observed (which is implicit in the atomistic view that regards each of these as separate aggregates of atoms). Rather, both observer and observed are merging and interpenetrating aspects of one whole reality, which is indivisible and unanalysable.

p14 The new form of insight can perhaps best be called **Undivided Wholeness in Flowing Movement**. This view implies that flow is, in some sense, prior to that of the ‘things’ that can be seen to form and dissolve in this flow. One can perhaps illustrate what is meant here by considering the ‘stream of consciousness’. This flux of awareness is not precisely definable, and yet it is evidently prior to the definable forms of thoughts and ideas which can be seen to form and dissolve in the flux, like ripples, waves and vortices in a flowing stream. As happens with such patterns of movement in a stream some thoughts recur and persist in a more or less stable way, while others are evanescent.

p17 Evidently, the notion of formative cause is relevant to the view of undivided wholeness in flowing movement, which has been seen to be implied in modern developments in physics, notably relativity theory and quantum theory. Thus, as has been pointed out, each relatively autonomous and stable structure (e.g., an atomic particle) is to be understood not as something independently and permanently existent but rather as a product that has been formed in the whole flowing movement and that will ultimately dissolve back into this movement. How it forms and maintains itself, then, depends on its place and function in the wholeness and the implicate order whole. So, we see that certain developments in modern physics imply a sort of insight into nature that is in respect to the notions of formative and final cause, essentially similar to ways of looking that were common in earlier times.

p19 For example, modern molecular biologists generally believe that the whole of life and mind can ultimately be understood in more or less mechanical terms, through some kind of extension of the work that has been done on the structure and function of DNA molecules. A similar trend has already begun to dominate in psychology. Thus we arrive at the very odd result that in the study of life and mind, which are just the fields in which formative cause acting in undivided and unbroken flowing movement is most evident to experience and observation, there is now the strongest belief in the fragmentary atomistic approach to reality.

p21 We have thus to be alert to give careful attention and serious consideration to the fact that our theories are not ‘descriptions of reality as it is’ but, rather, ever-changing forms of insight, which can point to or indicate a reality that is implicit and not describable or specifiable in its totality. This need for being thus watchful holds even for what is being said here in this chapter, in the sense that this is not to be regarded as ‘absolutely true knowledge of the nature of fragmentations

and wholeness'. Rather, it too is a *theory* that gives insight into this question. It is up to the reader to see for himself whether the insight is clear or unclear and what are the limits of its validity.

p23 Indeed, content and process are not two separately existent things, but, rather, they are two aspects of views of one whole movement. Thus fragmentary content and fragmentary process have to come to an end *together*.

p33 For when such insight occurs, the source cannot be within ideas already contained in the field of measure but rather has to be in the immeasurable, which contains the essential formative cause of all that happens in the field of measure. The measurable and the immeasurable are then in harmony and indeed one sees that they are but different ways of considering the one and undivided whole.

p37 The subject-verb-object structure of language, along with its world view, tends to impose itself very strongly in our speech, even in those cases in which some attention would reveal its evident inappropriateness. For example, consider the sentence 'It is raining.' Where is the 'It' that would, according to the sentence, be 'the rainer that is doing the raining'? Clearly, it is more accurate to say: 'Rain is going on.' Similarly, we customarily say, 'One elementary particle acts on another', but, as indicated in the previous chapter, each particle is only an abstraction of a relatively invariant form of movement in the whole field of the universe. So it would be more appropriate to say, 'Elementary particles are on-going movements that are mutually dependent because ultimately they merge and interpenetrate.' However, the same sort of description holds also on the larger-scale level. Thus, instead of saying, 'An observer looks at an object', we can more appropriately say, 'Observation is going on, in an undivided movement involving those abstractions customarily called "the human being" and "the object he is looking at".'

#### p68 THE THING AND THE THOUGHT

Given that thought is a material process that may be relevant in some more general context when it moves in parallel with intelligent perception, one is now led to inquire into the relationship between thought and reality. Thus, it is commonly believed that the content of thought is in some kind of reflective correspondence with 'real things', perhaps being a kind of copy, or image, or imitation of things, perhaps a kind of 'map' of things, or perhaps (along lines similar to those suggested by Plato) a grasp of the essential and innermost forms of things.

Are any of these views correct? Or is the question itself not in need of further clarification? For it presupposes that we know what is meant by the 'real thing' and by the distinction between reality and thought. But this is just what is not properly understood (e.g., even the relatively sophisticated Kantian notion of 'thing in itself' is just as unclear as the naïve idea of 'real thing').

p69 What, then, is the origin of the word 'reality'? This comes from the Latin 'res', which means 'thing'. To be real is to be a 'thing'. 'Reality' in its earlier meaning would then signify 'thinghood in general' or 'the quality of being a thing'.

It is particularly interesting that 'res' comes from the verb 'reri', meaning 'to think', so that literally, 'res' is 'what is thought about'. It is of course implicit that what is thought about has an existence that is independent of the process of thought, or in other words, that while we create and

sustain an idea as a mental image by thinking about it, we do not create and sustain a 'real thing' in this way. Nevertheless, the 'real thing' is limited by conditions that can be expressed in terms of thought.

...The main indication of the relationship between thing and thought is, then, that when one thinks correctly about a certain thing, this thought can, at least up to a point, guide one's actions in relationship to that thing to produce an overall situation that is harmonious and free of contradiction and confusion.

If the thing and the thought about it have their ground in the one undefinable and unknown totality of flux, then the attempt to explain their relationship by supposing that the thought is in reflective correspondence with the thing has no meaning, for both thought and thing are forms abstracted from the total process. The reason why these forms are related could only be in the ground from which they arise, but there can be no way of discussing reflective correspondence in this ground, because reflective correspondence implies knowledge, while the ground is beyond what can be assimilated in the content of knowledge.

p71 What we are proposing here is that such comprehension of the totality is not a reflective correspondence between 'thought' and 'reality as a whole'. Rather, it is to be considered as an art form, like poetry, which may dispose us toward order and harmony in the overall 'dance of the mind' (and thus in the general functioning of the brain and nervous system). This point has been made earlier, in the Introduction.

p80 As indicated earlier, thought with totality as its content has to be considered as an art form, like poetry, whose function is primarily to give rise to a new perception, and to action that is implicit in this perception, rather than to communicate reflective knowledge of 'how everything is'. This implies that there can no more be an ultimate form of such thought than there could be an ultimate poem (that would make all further poems unnecessary).

...Even this statement about the nature of our thinking is, however, itself only a form in the total process of becoming, a form which indicates a certain order of movement of the mind, and a certain disposition needed for the mind to engage harmoniously in such movement. So there is nothing final about it. Nor can we tell where it will lead. Evidently, we have to be open to further fundamental changes of order in our thought as we go on with the process.

#### p249 CONSCIOUSNESS AND THE IMPLICATE ORDER

To obtain an understanding of the relationship of matter and consciousness has, however, thus far proved to be extremely difficult, and this difficulty has its root in the very great difference in their basic qualities as they present themselves in our experience. This difference has been expressed with particularly great clarity by Descartes, who described matter as 'extended substance' and consciousness as 'thinking substance'. Evidently, by 'extended substance' Descartes meant something made up of distinct forms existing in space, in an order of extension and separation basically similar to the one that we have been calling explicate. By using the term 'thinking substance' in such sharp contrast to 'extended substance' he was clearly implying that the various distinct forms appearing in thought do not have their existence in such an order of extension and separation (i.e., some kind of space), but rather in a different order, in which extension and

separations have no fundamental significance. The implicate order has just this latter quality, so in a certain sense Descartes was perhaps anticipating that consciousness has to be understood in terms of an order that is closer to the implicate than it is to the explicate.

p250 Let us now consider what justification there is for the notion that matter and consciousness have the implicate order in common. First, we note that matter in general is, in the first instance, the object of our consciousness. However, as we have seen throughout this chapter, various energies such as light, sound, etc., are continually enfolding information in principle concerning the entire universe of matter into each region of space. Through this process, such information may of course enter our sense organs, to go on through the nervous system to the brain. More deeply, all the matter in our bodies, from the very first, enfolds the universe in some way. Is this enfolded structure, both of information and of matter (e.g., in the brain and nervous system), that which primarily enters consciousness?

Let us first consider the question of whether information is actually enfolded in the brain cells. Some light on this question is afforded by certain work on brain structure, notably that of Pribram. Pribram has given evidence backing up his suggestion that memories are generally recorded all over the brain in such a way that information concerning a given object or quality is not stored in a particular cell or localized part of the brain but rather that all the information is enfolded over the whole. This storage resembles a hologram in its function, but its actual structure is much more complex. We can then suggest that when the 'holographic' record in the brain is suitably activated, the response is to create a pattern of nervous energy constituting a partial experience similar to that which produced the 'hologram' in the first place. But it is also different in that it is less detailed, in that memories from many different times may merge together, and in that memories may be connected by association and by logical thought to give a certain further order to the whole pattern. In addition, if sensory data is also being attended to at the same time, the whole of this response from memory will, in general, fuse with the nervous excitation coming from the senses to give rise to an overall experience in which memory, logic, and sensory activity combine into a single unanalysable whole.

p262 We begin by noting that (as pointed out in chapters 1 and 5) current relativistic theories in physics describe the whole of reality in terms of a process whose ultimate element is a point event, i.e., something happening in a relatively small region of space and time. We propose instead that the basic element be a moment which, like the moment of consciousness, cannot be precisely related to measurements of space and time, but rather covers a somewhat vaguely defined region which is extended in space and has duration in time. The extent and duration of a moment may vary from something very small to something very large, according to the context under discussion (even a particular century may be a 'moment' in the history of mankind). As with consciousness, each moment has a certain explicate order, and in addition it enfolds all the others, though in its own way. So the relationship of each moment in the whole to all the others is implied by its total content: the way in which it 'holds' all the others enfolded within it.

p264 One may indeed say that our memory is a special case of the process described above, for all that is recorded is held enfolded within the brain cells and these are part of matter in general. The recurrence and stability of our own memory as a relatively independent sub-totality is thus brought

about as part of the very same process that sustains the recurrence and stability in the manifest order of matter in general.

It follows, then, that the explicate and manifest order of consciousness is not ultimately distinct from that of matter in general. Fundamentally these are essentially different aspects of the one overall order. This explains a basic fact that we have pointed out earlier – that the explicate order of matter in general is also in essence the sensuous explicate order that is presented in consciousness in ordinary experience.

p265 This connection of the mind and body has commonly been called psychosomatic (from the Greek ‘psyche’, meaning ‘mind’ and ‘soma’, meaning ‘body’). This word is generally used, however, in such a way as to imply that mind and body are separately existent but connected by some sort of interaction. Such a meaning is not compatible with the implicate order. In the implicate order we have to say that mind enfolds matter in general and therefore the body in particular. Similarly, the body enfolds not only the mind but also in some sense the entire material universe. (In the manner explained earlier in this section, both through the senses and through the fact that the constituent atoms of the body are actually structures that are enfolded in principle throughout all space.)

...In this higher-dimensional ground the implicate order prevails. Thus, within this ground, what is is movement which is represented in thought as the co-presence of many phases of the implicate order. As happens with the simpler forms of the implicate order considered earlier, the state of movement at one moment unfolds through a more inward force of necessity inherent in this overall state of affairs, to give rise to a new state of affairs in the next moment. The projections of the higher-dimensional ground, as mind and body, will in the later moment both be different from what they were in the earlier moment, though these differences will of course be related. So we do not say that mind and body causally affect each other, but rather that the movements of both are the outcome of related projections of a common higher-dimensional ground.

p266 Of course, even this ground of mind and body is limited. At the very least we have evidently to include matter beyond the body if we are to give an adequate account of what actually happens and this must eventually include other people, going on to society and to mankind as a whole. In doing this, however, we will have to be careful not to slip back into regarding the various elements of any given total situation as having anything more than relative independence. In a deeper and generally more suitable way of thinking, each of these elements is a projection, in a sub-totality of yet higher ‘dimension’. So it will be ultimately misleading and indeed wrong to suppose, for example, that each human being is an independent actuality who interacts with other human beings and with nature. Rather, all these are projections of a single totality. As a human being takes part in the process of this totality, he is fundamentally changed in the very activity in which his aim is to change that reality which is the content of his consciousness. To fail to take this into account must inevitably lead one to serious and sustained confusion in all that one does.

p268 Similarly, we are led to propose that this multidimensional reality may project into many orders of sequences of moments in consciousness. Not only do we have in mind here the relativity of psychological time discussed above, but also much more subtle implications. Thus, for example, people who know each other well may separate for a long time (as measured by the sequence of

moments registered by a clock) and yet they are often able to ‘take up from where they left off’ as if no time had passed. What we are proposing here is that sequences of moments that ‘skip’ intervening spaces are just as allowable forms of time as those which seem continuous.

p270 Is this ground the absolute end of everything? In our proposed views concerning the general nature of ‘the totality of all that is’ we regard even this ground as a mere stage, in the sense that there could in principle be an infinity of further development beyond it. At any particular moment in this development each such set of views that may arise will constitute at most a proposal. It is not to be taken as an *assumption* about what the final truth is supposed to be, and still less as a *conclusion* concerning the nature of such truth. Rather, this proposal becomes itself an active factor in the totality of existence which includes ourselves as well as the objects of our thoughts and experimental investigations. Any further proposals on this process will, like those already made, have to be *viable*. That is to say, one will require of them a general self-consistency as well as consistency in what flows from them in life as a whole. Through the force of an even deeper, more inward necessity in this totality, some new state of affairs may emerge in which both the world as we know it and our ideas about it may undergo an unending process of yet further change.

With this we have in essence carried the presentation of our cosmology and our general notions concerning the nature of the totality to a natural (though of course only a temporary) stopping point. From here on we can further survey it as a whole and perhaps fill in some of the details that have been left out in this necessarily sketchy treatment before going on to new developments of the kinds indicated above.

[End Bohm]

**We turn next to Shoichi Sakata**, who was also a Marxist physicist.

**Sakata, Shoichi**, *Philosophy and Methodology of Present-Day Science* (June 1968)

*Supplement of Progress of Theoretical Physics*, No. 50, 1971

<https://www.marxists.org/subject/japan/sakata/ch02.htm>

On the other hand, there has been developed another conception that nature is composed of infinite strata which are different from each other qualitatively, and that every stratum is subjected to its own law. This conception is the foundation of the dialectic view of nature, and was first proposed by Engels in the middle of the nineteenth century. This we may regard as the second distinctive character of the present-day science.

...In the natural world there exist infinitely many strata, and they combine themselves into a complex network rather than forming a one-dimensional series from the large to the small. And in each stratum, there governs each own law which exerts the greatest predictive power within its limit of applicability.

...However, in reality, Epicurus’ atom theory is quite different in its elements from that of Democritus. Marx had a sharp insight into this point, and on this account, I think that his doctoral dissertation bears a great significance as a basis of the present-day science.

...Aihara, however, pointed out keenly that all of the germs of his various social-scientific works such as *Capital*, of his materialistic conception of history and so on are included early in this doctoral thesis. I was moved profoundly by this suggestion, and found it true that a bud of the dialectic outlook of nature could also be contained in this first article by Marx, although I had thought it was developed chiefly by Engels and pushed forward further by Lenin.

...We must throw away the conception about elementary particles that is to regard them, like Dalton or Democritus, as the ultimate of matter. We put the basis of our research on this point of which Marx discussed for the first time. Engels wrote in his *Dialektik der Natur* that the essential difference between modern atomism and previous one lies in that the former recognises the existence of various different strata such as celestial objects, bodies, molecules and atoms and it is not the point that an atom is seen as an ultimate of matter. Lenin also wrote a famous phrase in his *Materialism and Empirio-Criticism*: "The electron is as inexhaustible as the atom."

However, the origin of these thoughts could again be traced back to Marx. If we read the letters exchanged by Marx and Engels, we find that Marx often mentioned that one should not regard an atom as an indivisible ultimate of matter. We can see that this thought had its origin in his doctoral thesis. It originates from his great insight into the difference between the atom theory of Democritus and that of Epicurus. The disparity between them is so subtle that it would easily fail to be noticed by ordinary people. Democritus conceived that an atom should be the ultimate of matter created by God; therefore, it is extremely perfect and it obeys only a rectilinear motion. On the other hand, however, Epicurus stated the view that the atom should never be perfect and it sometimes deviates from a rectilinear motion. Upon this difference Marx touched keenly. Namely, following the way of thinking by Democritus, an atom should take a form such as a sphere or a regular polyhedron since it is to be perfect.

...In the socialist countries, the textbooks of materialistic dialectics are presented from the research institute for philosophy in U.S.S.R., for instance, but they do not add anything unique to the methodology of the present-day science, they are rather scholastic. On the contrary, Taketani's work is very unique and contributed greatly to theoretical physics of Japan since the advent of meson theory...According to Taketani's analysis, the logic of quantum mechanics and that of Newtonian mechanics do not differ, essentially, from the logic of Marx's *Capital*.

...As I mentioned before, nineteenth century's science separated nature into physics, chemistry, biology, geology, etc., and took a way to specialisation in each field. So it has been thought that there is no relation between natural science and social science. However, standing on the dialectic viewpoint of nature, the human society also should be regarded as one of the strata in nature. Various strata are connected to each other into one, and a unified nature and these strata have been created in the evolution of nature. In order to advance sciences and to make use of them for the happiness of mankind, we must combine again those sciences, separated into pieces by nineteenth century's science, on the basis of the new outlook of nature and new methodology elaborated in the present-day science.

## **Further sources**

**Taketani, Mitsuo**



[https://en.wikipedia.org/wiki/Taketani\\_Mitsuo](https://en.wikipedia.org/wiki/Taketani_Mitsuo)

JK: Taketani was also a Marxist physicist. He describes a three-stage theory based on Hegel. Phenomenon, substance, and essence. Inspired his work on the meson.

**Laurikainen, K.V.**, *Wolfgang Pauli's Beyond the Atom: The Philosophic Thought of Wolfgang Pauli* (1988)

[https://books.google.com/books?id=QjLvCAAAQBAJ&printsec=frontcover&dq=wolfgang+pauli+parapsychology&hl=en&newbks=1&newbks\\_redir=0&sa=X&ved=2ahUKEwifoo\\_u1fPnAhWKpp4KHVvHDYAQ6AEwBHoECAEQAg#v=onepage&q=wolfgang%20pauli%20parapsychology&f=false](https://books.google.com/books?id=QjLvCAAAQBAJ&printsec=frontcover&dq=wolfgang+pauli+parapsychology&hl=en&newbks=1&newbks_redir=0&sa=X&ved=2ahUKEwifoo_u1fPnAhWKpp4KHVvHDYAQ6AEwBHoECAEQAg#v=onepage&q=wolfgang%20pauli%20parapsychology&f=false)

**Joravsky, David**, *Soviet Marxism and natural science 1917–1932* (1961)

JK: The book has received a lot of praise. Different versions of Marxism in the early Soviet period are carefully taken into account.

**Nielsen, Harry**, *Against the Copenhagen Interpretation of QM – in Defence of Marxism* (2005)

<https://www.marxist.com/quantum-mechanics-copenhagen130705.htm>

JK: Detailed account of the double slit experiment. He cites Feynman as a materialist.

Nielsen quotes Heisenberg: “I believe that the existence of the classical ‘path’ can be pregnantly formulated as follows: The ‘path’ comes into existence only when we observe it.”

**Nielsen** quotes **Alan Woods and Ted Grant**, *Reason in Revolt: Marxist Philosophy and Modern Science* (2012)

The whole point is that the laws of formal logic break down beyond certain limits. This most certainly applies to the phenomena of the subatomic world, where the laws of identity, contradiction and the excluded middle cannot be applied. Heisenberg defends the standpoint of formal logic and idealism, and therefore, inevitably arrives at the conclusion that the contradictory phenomena at the subatomic level cannot be comprehended by human thought at all. The contradiction, however, is not in the observed phenomena at the subatomic level, but in the hopelessly antiquated and inadequate mental schema of formal logic. The so-called "paradoxes of quantum mechanics" are precisely this. Heisenberg cannot accept the existence of dialectical contradictions, and therefore prefers to revert to philosophical mysticism— ‘we cannot know’, and all the rest of it.

Challenges to the Copenhagen interpretation

The physicist Max Born developed an alternative interpretation of wave-particle duality that avoided the idealism of the Copenhagen interpretation.

Einstein explained the idea like this:

“... it proved impossible to associate with these Schrödinger waves definite motions of the mass points - and that, after all, had been the original purpose of the whole construction. The difficulty appeared insurmountable until it was overcome

by Born in a way as simple as it was unexpected. The de Broglie-Schrödinger wave fields were not to be interpreted as a mathematical description of how an event actually takes place in time and space, though, of course, they have reference to such an event. Rather they are a mathematical description of what we can actually know about the system. They serve only to make statistical statements and predictions of the results of all measurements which we can carry out upon the system.”

...This insight into quantum mechanical behaviour is essentially the approach taken in all practical applications of quantum mechanics. It has sometimes been described as the “shut up and calculate” method (an expression often credited, probably wrongly, to Richard Feynman) as an understandable reaction to the idealism and mysticism of other interpretations. When, for example, a scientist in industry sets about designing a TV screen, it is this approach that he will use. The electrons leave the heated filament here with this probability, giving rise to this current; they are accelerated by the magnetic field *there*, and deflected to *that* position on the screen. (If asked by the research department manager, however, it is clear of course that the path does not exist.)

Feynman himself used this approach – particles plus probabilities – in his work on quantum electrodynamics, described in his very readable and accessible book “*QED - The Strange Theory of Light and Matter*.” Quantum electrodynamics is itself an extremely successful theory, with predictions that match experimental observations to a very high level of accuracy.

A different type of double slit experiment has been performed recently by the scientist Shahriar Afshar, at Rowan and Harvard Universities. Results from these experiments, published on the web, *directly contradict Bohr’s principle of complementarity*. The complementarity principle asserts that it is not possible to observe both wave and particle behaviour simultaneously. But Afshar’s results suggest otherwise. His experiments are the subject of a detailed discussion on weblogs at <http://irims.org/blog/index.php/questions> (a good example of how the internet can open up the discussion of new scientific results to a wider audience, in contrast to the secretive review process used by traditional scientific journals). A copy of a paper describing some of his results is available at <http://irims.bluemirror.net/quant-ph/030503/>

...Wave-like qualities emerge in a transition from quantity to quality; one particle or molecule is unpredictable, but many obey well-defined laws conforming to their statistical properties. Both waves and particles are observed – individual particles, which in large groups have the properties (interference patterns) of waves.

[End Nielsen]

**Mattick, Paul**, *Marxism and the New Physics* (1960)

<https://www.marxists.org/archive/mattick-paul/1960/new-physics.htm>

Hegel’s dialectic merely formed the point of departure for Marx’s critique of capitalist society. It was important to Marx because of “the enormous historical sense upon which it was founded,” and because “it dissolves all conceptions of final, absolute truth, and of a final, absolute state of humanity corresponding to it.”

**Gliniecki, Ben**, *Quantum physics, dialectics and society: from Marx and Engels to Khrennikov and Haven* (2013)

<https://www.marxist.com/quantum-society.htm>

JK: The authors try to apply quantum mechanics to society. Gliniecki considers their work “dialectical” but the authors do not use that term. Seems a stretch all the way around.

**Gieser, Suzanne**, *Pascual Jordan, The Innermost Kernel: Depth Psychology and Quantum Physics* (2004)

<http://download.e-bookshelf.de/download/0000/0093/47/L-G-0000009347-0002342611.pdf>

JK: Mentions Pascual Jordan’s interest in psi. Also that Jordan was or became a Nazi.

Gieser quotes **Schroer, Bert**, *Pascual Jordan, his contributions to quantum mechanics and his legacy in contemporary local quantum physics* (2003).

In Pauli’s acerbic way of dealing with such problems: “Jordan is in the possession of a pocket spectrometer by which he is able to distinguish intense brown from a deep red”. “Jordan served every regime trustfully” is another of Pauli’s comments. Pauli recommended Jordan for a position at the University of Hamburg and he also suggested that he should keep away from politics.

...It is however fair to note that with the exception of Max Born, Jordan’s other collaborators, especially von Neumann and Wigner, shared the bellicose kind of anti-communism; Wigner later became an ardent defender of the Vietnam war. Since both of them came from a cosmopolitan Jewish family background, their anti-communist fervor probably had its roots in their experience with the radical post World War I Bela Kuhn regime in the Hungarian part of the decaying Habsburg empire. Hence Jordan’s right wing anti-communist views posed no friction during the time of his collaboration with Wigner and von Neumann.

**Heterodoxology**, *Parapsychology in Germany – review of Heather Wolfram’s Stepchildren of Science* (2009)

<https://heterodoxology.com/2012/07/17/parapsychology-in-germany-review-of-heather-wolframs-stepchildren-of-science-2009/#more-1296>

One could, for example, have expected to find a discussion of the leading German quantum physicist Pascual Jordan, who in the early 1930s showed not only an interest in parapsychology, but also published widely on the revival of vitalism through quantum theory, and its repercussions for biology, psychology, and philosophy.

JK: Wanting to try to understand a tiny bit more about quantum theory, I read about Pascual Jordan’s contributions to the development of quantum theory. As I read the article, which is overflowing with equations, I encountered the following terms:

Zeeman effect, quantization of wave fields, Jordan algebras, von Neumann algebras, Fock space formalism, Schrödinger wave function, classical Lagrangians, Bose-Einstein statistics, anti-commutation relations, Jordan-Pauli commutator functions, Quantum Field Theory (QFT), non-abelian gauge theory, perturbative renormalization theory, basis-independent abstract operators,

vacuum polarization, Local Quantum Physics (LQP), Gupta-Bleuler formalism, magnetic monopoles, Hilbert space, u- and v- intertwiners, covariant (spinor, tensor) representations, Wick polynomials, spacetime-indexed set of local algebras, modular theory, nonunique field coordinatizations. complex Wigner space, involutive closed antilinear Tomita ST-operator, wedge-localized momentum space Wigner wave functions, Klein paradox, Weyl functor, CAR functor, half-integer spin, wedge-localized algebras, causally closed Lorentz-covariant family of double cone (diamond shaped) region, Wigner's zero mass "continuous spin" representation, helicity spectrum, second quantization, Wigner semi-infinite open "strings", classical Nambu-Goto string, auxiliary 2-dimensional de Sitter space, field algebra, Klein transformations, TCP theorem, isospin, scattering matrix (S-matrix), LSZ theory, Rindler world of uniformly accelerated Unruh observers, Sine-Gordon Lagrangian, Fermion-Boson relation, LQP, Haag-Ruelle scattering theory, Poincare invariance, wave packets, Moller operators, Newton-Wigner localization, hole theory, Dirac-Fock-Podolski multi-time formulation, ket state, bra configuration with conjugate charge, complex mass shell, Lehmann-Dyson type spectral representations, Kramers-Kronig dispersion theory, Veneziano dual model, BRST formalism, cohomology, Higgs field, supersymmetry, chiral theories, Minkowski spacetime, Huygens region, Moebius group, holographic process, KMS operator, Tomita Takesaki modular theory, DHR inclusions, PFG operators, Paley-Wiener-Schwarz fall-off properties, Smirnov's recipe, Koberle-Swieca  $Z(n)$  models, Mandelstam representations, Regge poles, Heisenberg-Chew S-matrix, Riemann surfaces, Teichmueller spaces, Liouville field theory,

<https://www.informationphilosopher.com/solutions/scientists/jordan/>

For me that was EOS - End of Story. Some people have amazing minds!

## Chapter 7 Materialism, Idealism and Consciousness

Philosophy has suffered from its association with theology. Theological dogmas are fixed and solid, and are regarded by the orthodox as incapable of movement, let alone improvement. Philosophers have too often tried to produce similarly final systems: they have not been content with the gradual approximations that satisfied men of science. In this they seem to me to have been mistaken. Philosophy should be piecemeal and provisional like science; for final truth belongs to heaven, and not to this world.

— [Bertrand Russell](#), *An Outline of Philosophy, Ch. I: Philosophical Doubts* (1927)

Continuing the discussion of issues in philosophy, the focus in this chapter is on mainstream views (non-Marxist approaches). The bulk of the chapter is devoted to David Chalmers and John Searle, two prominent philosophers in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries. There are extensive extracts and I offer a few comments along the way. Alfred North Whitehead and Rupert Sheldrake are then touched on, followed by additional sources.

Wikipedia:

[https://en.wikipedia.org/wiki/David\\_Chalmers](https://en.wikipedia.org/wiki/David_Chalmers)

**David John Chalmers** is an Australian [philosopher](#) and [cognitive scientist](#) specializing in the areas of [philosophy of mind](#) and [philosophy of language](#). He is a professor of philosophy and neural science at [New York University](#), as well as co-director of NYU's Center for Mind, Brain and Consciousness (along with [Ned Block](#)). In 2006, he was elected a Fellow of the [Australian Academy of the Humanities](#). In 2013, he was elected a Fellow of the [American Academy of Arts & Sciences](#).

Chalmers is best known for formulating the [hard problem of consciousness](#), and for popularizing the [philosophical zombie](#) thought experiment.

He and David Bourget cofounded [PhilPapers](#), a database of journal articles for philosophers.

**Chalmers, David**, *Consciousness and its Place in Nature* (2003)

<https://consc.net/papers/nature.pdf>

[Chalmers outlines types A-F of a materialism-consciousness spectrum and talks about the “hard problem” of consciousness.]

Chalmers:

page 2 in the text

The hard problem of consciousness is the problem of experience. Humans beings have subjective experience: there is something it is like to be them. We can say that a being is conscious in this sense – or is phenomenally conscious, as it is sometimes put—when there is something it is like to be that being. A mental state is conscious when there is something it is like to be in that state. Conscious states include states of perceptual experience, bodily sensation, mental imagery, emotional experience, occurrent thought, and more. There is something it is like to see a vivid green, to feel a sharp pain, to visualize the Eiffel tower, to feel a deep regret, and to think that one

is late. Each of these states has a phenomenal character, with phenomenal properties (or qualia) characterizing what it is like to be in the state.

JK: About this phrase “something it is like to be” -- it’s used all the time in recent philosophy. What does it really mean? Seems an odd way to put it. The claim is that we can attribute that to a squirrel but not to a chair. How about a molecule or an amoeba? To my way of thinking, there IS “something it is like to be them”. An amoeba responds to stimuli. What’s it like to be that? Does an amoeba have a very “subtle” form of mind? The complex and indeed subtle views of David Bohm tend to suggest that is the case (as can be seen in the previous chapter). While Bohm’s views are overall too subtle for me to grasp, it seems to me that he would hold that a worm, an amoeba, even an electron manifests (is an example of) “something it is like to be.”

Chalmers continues:

p3 A solution to the hard problem would involve an account of the relation between physical processes and consciousness, explaining on the basis of natural principles how and why it is that physical processes are associated with states of experience. A *reductive explanation* of consciousness will explain this wholly on the basis of physical principles that do not themselves make any appeal to consciousness. A *materialist* (or physicalist) solution will be a solution on which consciousness is itself seen as a physical process. A *nonmaterialist* (or nonphysicalist) solution will be a solution on which consciousness is seen as nonphysical (even if closely associated with physical processes). A *nonreductive* solution will be one on which consciousness (or principles involving consciousness) is admitted as a basic part of the explanation.

### **Google’s AI Bard on Chalmer’s types A-F:**

**JK: I queried Bard (now Gemini) in an earlier chapter and its responses seemed quite useful, so I sought its take on Chalmer’s “types”.**

#### **Bard:**

David Chalmers' types A through F are a taxonomy of views on the relationship between consciousness and the world. The first three types (A, B, and C) are reductive views, which hold that consciousness is a physical process that can be fully explained in terms of physical properties. The last three types (D, E, and F) are nonreductive views, which hold that consciousness is not a physical process and cannot be fully explained in terms of physical properties.

Type A: Materialism: Consciousness is a product of the physical brain.

Type B: Behaviorism: Consciousness is nothing more than behavior, or the disposition to behave.

Type C: Functionalism: Consciousness is a set of functional roles that can be realized by any physical system, including computers.

Type D: Substance dualism: Consciousness is a property of a non-physical substance, such as the soul.

Type E: Property dualism: Consciousness is a non-physical property of physical systems.

Type F: Naturalistic dualism: Consciousness is a fundamental property of the universe, irreducible to physical properties.

Chalmers argues that the first three types (A, B, and C) are inadequate because they cannot explain the subjective character of consciousness, or what it is like to have experiences. He calls this the "hard problem of consciousness."

The last three types (D, E, and F) are more promising, but they also have their own challenges. Substance dualism is often seen as incompatible with science, and property dualism is difficult to reconcile with the idea that the physical world is all there is. Naturalistic dualism is the most promising view in Chalmers' opinion, but it is still under development.

It is important to note that Chalmers' taxonomy is not exhaustive, and there are other views on the relationship between consciousness and the world that do not fit neatly into any of these categories. However, Chalmers' taxonomy provides a useful framework for thinking about the different ways that philosophers have tried to understand consciousness.

[End Bard]

JK: Bard is correct to note that there are indeed other views. In the previous chapter David Bohm has provided an alternative approach which does not use the categories of "physical" and "mental". As we have seen, his dialectical approach posits that there are no hard (fixed) opposites. Subject and object are intertwined and can reverse their roles; "physical" and "mental" are intermixed in endless flows within and between the "explicate order" and the "implicate order". Is Bohm correct; is his the way to solve the age-old dilemma of the relationship between the physical and the mental? I revisit this issue in Chapter 11.

JK: As we continue with Chalmers and then Searle, I will avoid citing the ins and outs of "epistemic gaps," "ontological gaps," "uncontested explananda," etc. -- terms which present-day philosophers like to toss around. The same for abstract arguments academic departments and journals love like "The paradigmatic sort of ontological entailment is necessitation: P necessitates Q when the material conditional  $P \rightarrow Q$  is metaphysically necessary, or when it is metaphysically impossible for P to hold without Q holding."

Why avoid? Because this is prose from the vantage point of abstract, unresolvable and often unintelligible philosophizing which has been going on for quite a few centuries. It's gateway prose for journals and university tenure. Or, to repeat, and I never get tired of doing so:

The question whether objective truth can be attributed to human thinking is not a question of theory but is a practical question. Man must prove the truth — i.e. the reality and power, the this-sidedness of his thinking in practice. The dispute over the reality or non-reality of thinking that is isolated from practice is a purely scholastic question.

-- Marx, *Theses on Feuerbach*

Chalmers:

11 In explaining life, for example, the only phenomena that present themselves as needing explanation are phenomena of adaptation, growth, metabolism, reproduction, and so on, and there is nothing else that even calls out for explanation.

JK: Here's another. How is it that the trillions of atoms and molecules, the intricate interactions of billions of cells, the highly complex foldings of DNA, and the integrated activity of thousands of organic tissues ever take place to form creatures capable of "adaptation, growth, metabolism, reproduction, and so on"? Seems to me that calls out for explanation. Levins and Lewontin, and from another corner of the universe, David Bohm offer, if not a definitive solution, bases for explanation.

Chalmers:

13 At a certain point, the debate between type-A materialists and their opponents usually comes down to intuition: most centrally, the intuition that consciousness (in a nonfunctionally defined sense) exists, or that there is something that needs to be explained (over and above explaining the functions). This claim does not gain its support from argument, but from a sort of observation, along with rebuttal of counterarguments. The intuition appears to be shared by the large majority of philosophers, scientists, and others; and it is so strong that to deny it, a type-A materialist needs exceptionally powerful arguments. The result is that even among materialists, type-A materialists are a distinct minority.

JK: What, you call on "intuition? Intuition? Amid all the highly intellectual verbiage about explananda, functional and phenomenal representation, seeking the "complete physical truth about the world," you invoke intuition? I think I hear the undulation of grass as Rational predecessors roll over in their graves.

Chalmers:

15 Here, one might suggest that something has gone wrong. Elsewhere, the only sort of place that one finds this sort of primitive principle is in the fundamental laws of physics. Indeed, it is often held that this sort of primitiveness—the inability to be deduced from more basic principles—is the mark of a fundamental law of nature. In effect, the type-B materialist recognizes a principle that has the epistemic status of a fundamental law, but gives it the ontological status of an identity. An opponent will hold that this move is more akin to theft than to honest toil: elsewhere, identifications are grounded in explanations, and primitive principles are acknowledged as fundamental laws.

JK: If I understand the above, and I may not, physicist Richard Feynman disagrees, referring to the unavoidable circularity of definition. Einstein raised analogous objections, as we have seen in Chapter 6.

Feynman: "We can't define anything precisely. If we attempt to, we get into that paralysis of thought that comes to philosophers... one saying to the other: 'you don't know what you are talking about!' The second one says: 'what do you mean by talking? What do you mean by you? What do you mean by know?'"

[https://bobsutton.typepad.com/my\\_weblog/2011/09/richard-feynman-on-the-folly-of-crafting-precise-definitions.html](https://bobsutton.typepad.com/my_weblog/2011/09/richard-feynman-on-the-folly-of-crafting-precise-definitions.html)



Chalmers:

28 We are used to the idea that some features of the world are fundamental: in physics, features such as spacetime, mass, and charge, are taken as fundamental and not further explained. If the arguments against materialism are correct, these features from physics do not exhaust the fundamental features of the world: we need to expand our catalog of the world's basic features.

JK: Yes, and physicists are now questioning whether space and time are fundamental categories. They cite the amplituhedron, which is a geometrical approach.

<https://en.wikipedia.org/wiki/Amplituhedron>

David Bohm questions whether there are any "basic features" at all. Lewontin and Levins agree, noting that the idea that "there is no bottom" has served us very well so far, compared with the contrary idea that we have found "basic features."

Chalmers:

29 There seem to be three main options for the nonreductionist here. First, one could deny the causal closure of the microphysical, holding that there are causal gaps in microphysical dynamics that are filled by a causal role for distinct phenomenal properties: this is type-D dualism. Second, one could accept the causal closure of the microphysical and hold that phenomenal properties play no causal role with respect to the physical network: this is type-E dualism. Third, one could accept that the microphysical network is causally closed, but hold that phenomenal properties are nevertheless integrated with it and play a causal role, by virtue of constituting the intrinsic nature of the physical: this is type-F monism.

33 All this suggests that there is at least room for a viable interactionism to be explored, and that the most common objection to interactionism has little force. Of course it does not entail that interactionism is true. There is much that is attractive about the view of the physical world as causally closed, and there is little direct evidence from cognitive science of the hypothesis that behavior cannot be wholly explained in terms of physical causes. Still, if we have independent reason to think that consciousness is irreducible, and if we wish to retain the intuitive view that consciousness plays a causal role, then this is a view to be taken very seriously.

JK: "Little direct evidence?? The question isn't about explaining behavior; it's about explaining the mental activity that leads to behavior, including "impossible" processes like a successful remote viewing session -- processes sponsored by the US government for over 20 years in the "Star Gate" remote viewing project.

Chalmers:

39 There is one sort of principled problem in the vicinity. Our phenomenology has a rich and specific structure: it is unified, bounded, differentiated into many different aspects, but with an underlying homogeneity to many of the aspects, and appears to have a single subject of experience. It is not easy to see how a distribution of a large number of individual microphysical systems, each with their own protophenomenal properties, could somehow add up to this rich and specific structure. Should one not expect something more like a disunified, jagged collection of phenomenal spikes.

This is a version of what James called the *combination problem* for panpsychism, or what Stoljar (2001) calls the *structural mismatch* problem for the Russellian view... To answer it, it seems that we need a much better understanding of the *compositional* principles of phenomenology: that is, the principles by which phenomenal properties can be composed or constituted from underlying phenomenal properties, or protophenomenal properties.

JK: This is in reference to Type F. Raises what is called the “binding problem” in mainstream cognitive neuroscience. Put simply, it is a mystery how so many parts work together to create our experience.

Chalmers:

39 One way this might happen is by a sort of causal overdetermination: physical states causally determine behavior, but phenomenal states cause behavior at the same time.

JK: Referring to Althusser’s notion of “overdetermination”.

Wikipedia: Overdetermination occurs when a single-observed effect is determined by multiple causes, any one of which alone would be conceivably sufficient to account for (“determine”) the effect.

Chalmers:

41 Second, some nonmaterialists are *idealists* (in a Berkeleyan sense) [JK: Idealist philosopher George Berkeley (1685-1753)], holding that the physical world is itself constituted by the conscious states of an observing agent. We might call this view type-I monism. It shares with type-F monism the property that phenomenal states play a role in constituting physical reality, but on the type-I view this happens in a very different way: not by having separate “microscopic” phenomenal states underlying each physical state, but rather by having physical states constituted holistically by a “macroscopic” phenomenal mind. This view seems to be non-naturalistic in a much deeper sense than any of the views above, and in particular seems to suffer from an absence of causal or explanatory closure in nature: once the natural explanation in terms of the external world is removed, highly complex regularities among phenomenal states have to be taken as unexplained in terms of simpler principles. But again, this sort of view should at least be acknowledged.

JK: Although the passage is not entirely clear to me, “macroscopic” phenomenal mind appears consistent with the “Consciousness is the fundamental” viewpoint of parapsychologist Jeff Mishlove and remote viewer Marty Rosenblatt (two prominent figures in the remote viewing community).

Chalmers:

41 As I see things, the best options for a nonreductionist are type-D dualism, type-E dualism, or type-F monism: that is, interactionism, epiphenomenalism, or panprotopsyism. If we acknowledge the epistemic gap between the physical and the phenomenal, and we rule out primitive identities and strong necessities, then we are led to a disjunction of these three views. Each of the views has at least some promise, and none have clear fatal flaws. For my part, I give some credence to each of them. I think that in some ways the type-F view is the most appealing, but this sense is largely grounded in aesthetic considerations whose force is unclear.

...The choice between these three views may depend in large part on the development of specific theories within these frameworks. Especially for the type-D view and type-F view, further theoretical work is crucial in assessing the theories (e.g., in explicating quantum interactionism, or in understanding phenomenal composition). It may also be that the empirical science of consciousness will give some guidance. As the science progress, we will be led to infer simple principles that underlie correlations between physical and phenomenal states. It may be that these principles turn out to point strongly toward one or the other of these views: e.g., if simple principles connecting microphysical states to phenomenal or protophenomenal states can do the explanatory work, then we may have reason to favor a type-F view, while if the principles latch onto the physical world at a higher level, then we may have reason to favor a type-D or type-E view. And if consciousness has a specific pattern of effects on the physical world, as the type-D view suggests, then empirical studies ought in principle to be able to find these effects, although perhaps only with great difficulty.

[End Chalmers]

JK: Or perhaps philosophers will find themselves moving toward the approaches outlined by Bohm or Levins and Lewontin.

**Next: John Searle**

Wikipedia:

[https://en.wikipedia.org/wiki/John\\_Searle](https://en.wikipedia.org/wiki/John_Searle)

**John Rogers Searle** (born July 31, 1932) is an American [philosopher](#) widely noted for contributions to the [philosophy of language](#), [philosophy of mind](#), and [social philosophy](#). He began teaching at UC Berkeley in 1959, and was Willis S. and Marion Slusser Professor Emeritus of the Philosophy of Mind and Language and Professor of the Graduate School at the [University of California, Berkeley](#), until June 2019, when his status as professor emeritus was revoked because he was found to have violated the university's sexual harassment policies.

As an undergraduate at the [University of Wisconsin–Madison](#), Searle was secretary of "Students against [Joseph McCarthy](#)". He received all his university degrees, BA, MA, and DPhil, from the [University of Oxford](#), where he held his first faculty positions. Later, at UC Berkeley, he became the first tenured professor to join the 1964–1965 [Free Speech Movement](#).

JK: On a personal note, I was one of the 800 arrested in 1964 during the Free Speech Movement in Berkeley (a city named after Bishop Berkeley) and I recall we felt gratitude that a member of the faculty had supported us and boldly stepped forward to join us. Later, as a landlord his actions were, unfortunately, not so praiseworthy. But, as Marx said, social being determines social consciousness.

Resuming Wikipedia:

In the late 1980s, Searle challenged the restrictions of Berkeley's 1980 [rent stabilization ordinance](#). Following what came to be known as the California Supreme Court's "Searle Decision" of 1990, Berkeley changed its rent control policy, leading to large rent increases between 1991 and 1994.

In 2000, Searle received the [Jean Nicod Prize](#); in 2004, the [National Humanities Medal](#); and in 2006, the [Mind & Brain Prize](#). In 2010 he was elected to the [American Philosophical Society](#). Searle's early work on [speech acts](#), influenced by [J.L. Austin](#) and [Ludwig Wittgenstein](#), helped establish his reputation. His notable concepts include the "[Chinese room](#)" argument against "[strong](#)" [artificial intelligence](#).

**John Searle**, *The Rediscovery of the Mind* (1992; 1994 MIT edition)

JK: Searle's book is very useful for its critiques of existing cognitive science and research. He also writes clearly, which is very welcome.

Searle:

p1 in text

*The Solution to the Mind-Body Problem and Why Many Prefer the Problem to the Solution*

The famous mind-body problem, the source of so much controversy over the past two millennia, has a simple solution. This solution has been available to any educated person since serious work began on the brain nearly a century ago, and, in a sense, we all know it to be true. Here it is: Mental phenomena are caused by neurophysiological processes in the brain and are themselves features of the brain.

JK: There is just one small problem with this sensible 'everyday' solution from a prominent philosopher. Thousands of examples of psi show that mental processes are not confined to the brain. We can obtain information distant in space and time, far beyond what current mainstream science believes that "neurophysiological processes in the brain" can accomplish. We will see examples in Part 2 of the Sourcebook.

Searle:

To distinguish this view from the many others in the field, I call it "biological naturalism." Mental events and processes are as much part of our biological natural history as digestion, mitosis, meiosis, or enzyme secretion.

14 The brain causes certain "mental" phenomena, such as conscious mental states, and these conscious states are simply higher-level features of the brain. Consciousness is a higher-level or emergent property of the brain in the utterly harmless sense of "higher-level" or "emergent" in which solidity is a higher-level emergent property of H<sub>2</sub>O molecules when they are in a lattice structure (ice), and liquidity is similarly a higher-level emergent property of H<sub>2</sub>O molecules when they are, roughly speaking, rolling around on each other (water).

JK: "Utterly harmless sense." Seems an odd descriptor for the alleged similarity of "emergent properties" of consciousness and H<sub>2</sub>O molecules! We have physics and chemistry to describe solidity and liquidity. What does present day science have to explain the ability of "neurological processes of the brain" to enable a remote viewer in Palo Alto to draw a huge crane in Russia? Or the same viewer to provide the names of files in cabinets in a Top Secret NSA facility in West Virginia?

63 Lots of commonsense psychological beliefs have been shown to be false, and no doubt more will be. Consider a spectacular example: Common sense tells us that our pains are located in

physical space within our bodies, that for example, a pain in the foot is literally inside the area of the foot. But we now know that is false. The brain forms a body image, and pains, like all bodily sensations, are parts of the body image. The pain-in-the-foot is literally in the physical space of the brain.

JK: We don't know that - at least I don't. A headache feels localized in the head, and a foot pain feels localized in the foot. But we know that consciousness apparently extends outside the brain, so we can't be sure where that pain actually is, if indeed it has a single locale. Bohm would probably say that the brain and foot both contribute to the sensation and you cannot exclude one or the other from the sensation of pain. Or perhaps the pain is smeared over the entire "biomind" (a term of Ingo Swann, whom we'll encounter in Part Two).

Searle:

65 The view of the world as completely objective has a very powerful hold on us, though it is inconsistent with the most obvious facts of our experiences. As the picture is false, we ought to be able to break the hold. I don't know any simple way to do that. One of the many aims of this book, however, is to begin the task. In this chapter I want to describe some thought experiments that will challenge the accuracy of the picture. Initially the aim of the thought experiments is to challenge the conception of the mental as having some important internal connection to behavior.

68 What is the philosophical significance of these three thought experiments? It seems to me there is a number of lessons to be learned. The most important is that they illustrate something about the relationship between mind and behavior. What exactly is the importance of behavior for the concept of mind? *Ontologically speaking, behavior, functional role, and causal relations are irrelevant to the existence of conscious mental phenomena. Epistemically, we do learn about other people's conscious mental states in part from their behavior. Causally, consciousness serves to mediate the causal relations between input stimuli and output behavior; and from an evolutionary point of view, the conscious mind functions causally to control behavior. But ontologically speaking, the phenomena in question can exist completely and have all of their essential properties independent of any behavioral output.*

Most of the philosophers I have been criticizing would accept the following two propositions:

1. Brains cause conscious mental phenomena
2. There is some sort of conceptual or logical connection between conscious mental phenomena and external behavior.

But what the thought experiments illustrate is that these two cannot be held consistently with a third:

3. The capacity of the brain to cause consciousness is conceptually distinct from its capacity to cause motor behavior. A system could have consciousness without behavior and behavior without consciousness.

But given the truth of 1 and 3, we have to give up 2.

JK: Option 1 is not the whole story -- which renders these thought experiments moot. If consciousness extends beyond the brain, and psi provides strong evidence it does, then the first

premise is wrong. It is true that thought experiments aided Einstein in developing world-shaking theories of physics. But what can a thought experiment, even “the best,” do to advance our understanding of thought itself and its relation to the natural world? Can thought explain itself without the aid of “the natural world”?

JK: Also, I have questions about the assertion that “A system could have consciousness without behavior and behavior without consciousness.” What does Searle have in mind as conceivable examples on either end of this? What sorts of systems would these be?

Searle:

83 What I mean by "consciousness" can best be illustrated by examples. When I wake up from a dreamless sleep, I enter a state of consciousness, a state that continues as long as I am awake. When I go to sleep or am put under a general anesthetic or die, my conscious states cease. If during sleep I have dreams, I become conscious, though dream forms of consciousness in general are of a much lower level of intensity and vividness than ordinary waking consciousness. Consciousness can vary in degree even during our waking hours, as for example when we move from being wide awake and alert to sleepy or drowsy, or simply bored and inattentive. Some people introduce chemical substances into their brains for the purpose of producing altered states of consciousness, but even without chemical assistance, it is possible in ordinary life to distinguish different degrees and forms of consciousness. Consciousness is an on/off switch: a system is either conscious or not. But once conscious, the system is a rheostat: there are different degrees of consciousness.

JK: Most would consider a person dreaming to be unconscious except when they are having a lucid dream. Why depart from this common sense understanding? It makes more sense to say that a person gains a form of consciousness when having a lucid dream and another form (or degree) when waking up.

84 Conscious states always have a content. One can never just be conscious, rather when one is conscious, there must be an answer to the question, "What is one conscious of?" But the "of" of "conscious of" is not always the "of" of intentionality. If I am conscious of a knock on the door, my conscious state is intentional, because it makes reference to something beyond itself, the knock on the door. If I am conscious of a pain, the pain is not intentional, because it does not represent anything beyond itself.

JK: “Attentional” would seem to be a more precise descriptor. Also, I don’t doubt that meditators have achieved a conscious state “without content.”

91 When I lectured on the mind-body problem in India and was assured by several members of my audience that my views must be mistaken, because they personally had existed in their earlier lives as frogs or elephants, etc., I did not think, "Here is evidence for an alternative world view," or even "Who knows, perhaps they are right." And my insensitivity was much more than mere cultural provincialism: Given what I know about how the world works, I could not regard their views as serious candidates for truth.

JK: There is considerable anecdotal evidence of past lives (e.g. the extensive investigations of Ian Stevenson).

105 Furthermore, once you get rid of the idea that consciousness is a stuff that is the "object" of introspection, it is easy to see that it is spatial, because it is located in the brain. We are not aware in conscious experience of either the spatial location or the dimensions of our conscious experience, but why should we be? It is an extremely tricky neurophysiological question, one we are a long way from solving, to figure out exactly what the locus of conscious experience in our brains is. It might, for all we know, be distributed over very large portions of the brain.

JK: Consciousness might, for all we know, be distributed over a small portion of the immediate environment, have no existence in Spacetime, or exist in another dimension.

127 Two subjects are crucial to consciousness, but I will have little to say about them because I do not yet understand them well enough. The first is temporality. Since Kant we have been aware of an asymmetry in the way that consciousness relates to space and to time. Although we experience objects and events as both spatially extended and of temporal duration, our consciousness itself is not experienced as spatial, though it is experienced as temporally extended. Indeed, the spatial metaphors for describing time seem almost inevitable for consciousness as well, as when we speak for example of the "stream of consciousness." Notoriously, phenomenological time does not exactly match real time, but I do not know how to account for the systematic character of the disparities.

JK: On the contrary, our consciousness can be experienced as spatial. I feel localized in this room at this moment, I am here. However, what Searle does not mention (and perhaps did not know) is that remote viewers can occasionally "bilocate". Their consciousness seems to be, maybe is, at a distant place; they feel they are there, and they can accurately describe what is there.

JK: I don't know just what Searle means by saying that consciousness "is experienced as temporally extended". Whatever he means by it, I doubt he is referring to the fact that remote viewers can describe past events and provide usable information about future events (e.g. predictions of financial trades).

Searle:

127 The second neglected topic is society. I am convinced that the category of "other people" plays a special role in the *structure* of our conscious experiences, a role unlike that of objects and states of affairs; and I believe that this capacity for assigning a special status to other loci of consciousness is both biologically based and is a Background presupposition for all forms of collective intentionality (Searle 1990). But I do not yet know how to demonstrate these claims, nor how to analyze the structure of the social element in individual consciousness.

JK: Sounds like Marxism to me -- in particular, like the Russian philosopher Ilyenkov and others who attribute consciousness and its development entirely to social phenomena.

128 Finite Modalities

Human consciousness is manifested in a strictly limited number of modalities. In addition to the five senses of sight, touch, smell, taste, and hearing, and the sixth, the "sense of balance," there are also bodily sensations ("proprioception") and the stream of thought.

JK: Some count 17 senses, c. 30. Ingo Swann used the latter figure (see Chapter 8).

214 For real computers of the kind you buy in the store, there is no homunculus problem, because each user is the homunculus in question. But if we are to suppose that the brain is a digital computer, we are still faced with the question "And who is the user?" Typical homunculus questions in cognitive science are such as the following: "How does the visual system compute shape from shading; how does it compute object distance from size of retinal image?" A parallel question would be, "How do nails compute the distance they are to travel in the board from the impact of the hammer and the density of the wood?" And the answer is the same in both sorts of case: If we are talking about how the system works intrinsically, neither nails nor visual systems compute anything. We as outside homunculi might describe them computationally, and it is often useful to do so. But you do not understand hammering by supposing that nails are somehow intrinsically implementing hammering algorithms, and you do not understand vision by supposing the system is implementing, for example, the shape from shading algorithm.

JK: Whoa! A person consciously hammers the nail into the wood. We can understand human vision as a system that implements processes that have organization and structure. In the first process, we can and do recognize, name, describe, understand, replicate and use some of those processes. In the second instance, there need not be a homunculus (or conscious agent). Quite a difference.

215 But if what I have said so far is correct, then there is something fishy about this whole project. I used to believe that as a causal account, the cognitivist's theory was at least false, but I now am having difficulty formulating a version of it that is coherent even to the point where it could be an empirical thesis at all. The thesis is that there are a whole lot of symbols being manipulated in the brain, 0's and 1's flashing through the brain at lightning speed and invisible not only to the naked eye but even to the most powerful electron microscope, and it is these that cause cognition. But the difficulty is that the 0's and 1's as such have no causal powers because they do not even exist except in the eyes of the beholder. The implemented program has no causal powers other than those of the implementing medium because the program has no real existence, no ontology, beyond that of the implementing medium. Physically speaking, there is no such thing as a separate "program level."

JK: I doubt upholders of a digital theory of cognition believe there are invisible 0's and 1's flashing through the brain. The researchers do theorize that neuronal processing utilizes "codes" of some sort. There must be some sort of organization, some complex patterns that neurons use to make perception possible. We don't know what those "codes" are. They must be quite complex or we would have had an inkling of them by now. It makes very little sense to suppose that the neurons do not have such patterns. If there were no patterns, how could they function?

Searle:

216 You can see this if you go back to the primal story and remind yourself of the difference between the mechanical computer and Turing's human computer. In Turing's human computer there really is a program level intrinsic to the system, and it is functioning causally at that level to convert input to output. This is because the human is consciously following the rules for doing a certain computation, and this causally explains his performance. But when we program the



mechanical computer to perform the same computation, the assignment of a computational interpretation is now relative to us, the outside homunculi. There is no intentional causation intrinsic to the system. The human computer is consciously following rules, and this fact explains his behavior, but the mechanical computer is not literally following any rules. It is designed to behave exactly as if it were following rules; so for practical, commercial purposes it does not matter that it is not actually following any rules. It could not be following rules because it has no intentional content intrinsic to the system that is functioning causally to produce the behavior. Now cognitivism tells us that the brain functions like the commercial computer and that this causes cognition. But without a homunculus, both commercial computer and brain have only patterns, and the patterns have no causal powers in addition to those of the implementing media. So it seems there is no way cognitivism could give a causal account of cognition.

JK: The patterns that the brain implements may be construed by us as rules. They are not rules to the computer, Searle says. But contrary to Searle these patterns do have “causal powers”. They operate, and movement, vision, smell and all the other senses take place. We can say this is causative. Searle holds that these lifeless processes are not causative because they are not cognizant, they are not thinking entities. However, ChatGPT-4 and other AI programs are producing opinions that befuddle the programmers. They may simply make something up. They may say that an author wrote an article with a specific title in a specific year - when in fact no such thing happened. Further, LLM’s (large language models) hold startling conversations with humans, as if they had a form of consciousness. We don’t know if larger models will actually develop a form of artificial consciousness. I have been skeptical of Kurzweil’s alleged “singularity” when computers will become conscious, but exchanges with AI have left many of us worried that however you define it, super intelligence is already here and AGI (Artificial General Intelligence) may well be soon as well -- and perhaps out of our control, with possibly devastating consequences. AI may become “causative”.

218 I have never heard anyone say that all this is just the hardware implementation, and that they should have figured out which program the frog was implementing. I do not doubt that you could do a computer simulation of the frog's "bug detectors." Perhaps someone has done it. But we all know that once you understand how the frog's visual system *actually* works, the "computational level" is just irrelevant.

JK: Whatever Searle means by “understand” here, there is a lot more going on than sustained contrast detectors. Everything that goes into perception has to be organized in some fashion or perception would not result. There must be what we call rules in these processes and there may be algorithms we can “understand” that describe what goes on. We don’t know what these rules or algorithms are but it would of course be very useful to understand them. It would be a game changer. Perhaps the math is too difficult for humans to understand. Maybe, but it is worthwhile to try to figure out these algorithms/patterns, and some cognitive researchers are trying hard to do it. I’m curious what the many alien civilizations that have been visiting us have to say on this point. (The Sourcebook discusses this much-maligned topic in Appendix 7.)

### **For further exploration:**

**Clark, Andy and Chalmers, David, *Extended Mind* (1987)**

JK: Grants that mind extends beyond the body, but it is “in a social way”, referring to the environment. From what I’ve read, Clark and Chalmers do not touch psi.

[https://en.wikipedia.org/wiki/Extended\\_mind\\_thesis](https://en.wikipedia.org/wiki/Extended_mind_thesis)

**Gallagher, Shaun, *Socially Extended Mind* (2013)**

JK: Claims to have a “liberal” interpretation of “extended mind”. The “conservative” take would be to say that notebooks are part of the cognitive process. Gallagher argues that social institutions are part of the cognitive process but does not argue this is so in an ontological way -- it’s more in a descriptive, terminological way.

[https://www.researchgate.net/publication/228420473\\_The\\_socially\\_extended\\_mind](https://www.researchgate.net/publication/228420473_The_socially_extended_mind)

## **Alfred North Whitehead - Process Philosophy**

Wikipedia:

[https://en.wikipedia.org/wiki/Alfred\\_North\\_Whitehead](https://en.wikipedia.org/wiki/Alfred_North_Whitehead)

One philosophical school which has historically had a close relationship with process philosophy is American [pragmatism](#). Whitehead himself thought highly of [William James](#) and [John Dewey](#), and acknowledged his indebtedness to them in the preface to *Process and Reality*. Charles Hartshorne (along with [Paul Weiss](#)) edited the collected papers of [Charles Sanders Peirce](#), one of the founders of pragmatism. Noted [neopragmatist Richard Rorty](#) was in turn a student of Hartshorne. Today, [Nicholas Rescher](#) is one example of a philosopher who advocates both process philosophy and pragmatism.

In physics, [Whitehead's theory of gravitation](#) articulated a view that might perhaps be regarded as dual to [Einstein's general relativity](#). It has been severely criticized. Yutaka Tanaka suggested that the [gravitational constant](#) disagrees with experimental findings, and proposed that Einstein's work does not actually refute Whitehead's formulation. Whitehead's view has now been rendered obsolete, with the discovery of [gravitational waves](#), phenomena observed locally that largely violate the kind of local flatness of space that Whitehead assumes. Consequently, Whitehead's cosmology must be regarded as a local approximation, and his assumption of a uniform spatio-temporal geometry, Minkowskian in particular, as an often-locally-adequate approximation. An exact replacement of Whitehead's cosmology would need to admit a Riemannian geometry. Also, although Whitehead himself gave only secondary consideration to [quantum theory](#), his [metaphysics](#) of processes has proved attractive to some physicists in that field. [Henry Stapp](#) and [David Bohm](#) are among those whose work has been influenced by Whitehead.

Dictionary of Whitehead terms

<http://www.philosopher.eu/a-n-whitehead-summary/>

Notes for a class on Whitehead

<http://www.philosopher.eu/texts/1248-2/>

**Griffin, David Ray, <http://www.anthoniflood.com/griffinparapsychology.htm>**

JK: Griffin does “go there.” A Whiteheadian philosophy of psi. Some Chinese philosophers have promoted Whitehead and process philosophy, This is the same author who has written extensively about the 9-11 attack.

Griffin:

Although this is the first extensive treatment of parapsychology or psychical research from a Whiteheadian perspective, there have been a few shorter essays; see Bagby (1957), Eslick (1983, 1987), Hooper (1944), and Quillen (1979).

### **Regarding Rupert Sheldrake:**

Rupert Sheldrake, PhD (1942- ) is a biologist and author best known for his hypothesis of morphic fields.

**Watts, Fraser**, *Morphic Fields and Extended Mind*, Journal of Consciousness Studies, 18, No. 11–12, 2011, pp. 203–24

<https://www.sheldrake.org/research/morphic-resonance/scientific-papers-on-morphic-resonance>

JK: Discusses Sheldrake's morphogenetic fields (later called morphic fields). By hypothesizing "fields" Sheldrake goes beyond Whitehead's ideas about ultimate constituents being single events rather than objects.

Watts:

On his [Sheldrake's] intellectual debt to Whitehead: "In Whitehead's phrase, organisms are "structures of activity" at all levels of complexity. Even subatomic particles, atoms, molecules, and crystals are organisms, and hence in some sense alive. From the organismic point of view, life is not something that has emerged from dead matter, and that needs to be explained in terms of the added vital factors of vitalism. *All* nature is alive. The organizing principles of living organisms are different in degree but not different in kind from the organizing principles of molecules or of societies or of galaxies. 'Biology is the study of the larger organisms, whereas physics is the study of the smaller organisms', as Whitehead put it."

His fullest treatment of these phenomena, which he explains (along with ordinary perception) in terms of extended MORPHIC FIELDS AND EXTENDED MIND, is to be found in *The Sense of Being Stared At*. The basic claim of Sheldrake's extended mind hypothesis is that minds 'stretch out into the world around bodies', and that this extension happens 'through fields that link organisms to their environment and to each other' (Sheldrake, 2003, p. 9). In this respect, Sheldrake's hypothesis is an extension of his theory of morphic fields.

Sheldrake: "Morphic fields also underlie our perceptions, thoughts and other mental processes. The morphic fields of mental activities are called mental fields. Through mental fields, the extended mind reaches out into the environment through attention and intention, and connects with other members of social groups. These fields help explain telepathy, the sense of being stared at, clairvoyance and psychokinesis. They may also help in the understanding of premonitions and precognitions through intentions projecting into the future." (Sheldrake, 2003, p. 277)

JK: Sheldrake claims that mental fields exist. But to date there is no empirical evidence for them. They are a spinoff of morphic fields, which also don't have any empirical evidence. David Ray Griffin says that Sheldrake's ideas can be tested empirically. Remote viewer Ingo Swann talked about "universes" or "fields" when he was undertaking "analytics experiments"; it is not clear whether Swann considered the fields physical or mental or a combination of the two.

Sheldrake holds that we project our mind out, as an amoeba projects pseudopodia and neurons project filaments. Also that we project images outside our heads.

**Rupert Sheldrake**, *The Credit Crunch for Materialism* (2009)

<https://www.sheldrake.org/research/the-credit-crunch-for-materialism>

Credit crunches happen because of too much credit and too many bad debts. Credit is literally belief, from the Latin credo, "I believe." Once confidence ebbs, the loss of trust is self-reinforcing. The game changes. Something similar is happening with materialism. Since the nineteenth century, its advocates have promised that science will explain everything in terms of physics and chemistry; science will show that there is no God and no purpose in the universe; it will reveal that God is a delusion inside human minds and hence in human brains; and it will prove that brains are nothing but complex machines.

Materialists are sustained by the faith that science will redeem their promises, turning their beliefs into facts. Meanwhile, they live on credit. The philosopher of science Sir Karl Popper described this faith as "promissory materialism" because it depends on promissory notes for discoveries not yet made. Despite all the achievements of science and technology, it is facing an unprecedented credit crunch.

In 1963, when I was studying biochemistry at Cambridge I was invited to a series of private meetings with Francis Crick and Sydney Brenner in Brenner's rooms in King's College, along with a few of my classmates. They had just cracked the genetic code. Both were ardent materialists. They explained there were two major unsolved problems in biology: development and consciousness. They had not been solved because the people who worked on them were not molecular biologists, nor very bright. Crick and Brenner were going to find the answers within 10 years, or maybe 20. Brenner would take development, and Crick consciousness. They invited us to join them.

Both tried their best. Brenner was awarded the Nobel Prize in 2002 for his work on the development of the nematode worm *Caenorhabditis*. Crick corrected the manuscript of his final paper on the brain the day before he died in 2004. At his funeral, his son Michael said that what made him tick was not the desire to be famous, wealthy or popular, but "to knock the final nail into the coffin of vitalism."

He failed. So did Brenner. The problems of development and consciousness remain unsolved. Many details have been discovered, dozens of genomes have been sequenced, and brain scans are ever more precise. But there is still no proof that life and minds can be explained by physics and chemistry alone.

The fundamental proposition of materialism is that matter is the only reality. Therefore consciousness is nothing but brain activity. However, among researchers in neuroscience and consciousness studies there is no consensus. Leading journals such as *Behavioural and Brain Sciences* and the *Journal of Consciousness Studies* publish many articles that reveal deep problems with the materialist doctrine. For example, Steven Lehar argues that inside our heads there must be a miniaturized virtual-reality full-colour three-dimensional replica of the world. When we look at the sky, the sky is in our heads. Our skulls are beyond the sky. Others, like the psychologist Max

Velmans, argue that virtual reality displays are not confined to our brains; they are life-sized, not miniaturized. Our visual perceptions are outside our skulls, just where they seem to be. The philosopher David Chalmers has called the very existence of subjective experience the "hard problem" of consciousness because it defies explanation in terms of mechanisms. Even if we understand how eyes and brains respond to red light, for example, the quality of redness is still unaccounted for.

In biology and psychology the credit-rating of materialism is falling fast. Can physics inject new capital? Some materialists prefer to call themselves physicalists, to emphasize that their hopes depend on modern physics, not nineteenth-century theories of matter. But physicalism's credit-rating has been reduced by physics itself, for four reasons.

First, some physicists argue that quantum mechanics cannot be formulated without taking into account the minds of observers; hence minds cannot be reduced to physics, because physics presupposes minds. Second, the most ambitious unified theories of physical reality, superstring and M theories, with 10 and 11 dimensions respectively, take science into completely new territory. They are a very shaky foundation for materialism, physicalism or any other pre-established belief system. They are pointing somewhere new. Third, the known kinds of matter and energy constitute only about 4% of the universe. The rest consists of dark matter and dark energy. The nature of 96% of reality is literally obscure.

Fourth, the cosmological anthropic principle asserts that if the laws and constants of nature had been slightly different at the moment of the Big Bang, biological life could never have emerged, and hence we would not be here to think about it. So did a divine mind fine-tune the laws and constants in the beginning? Some cosmologists prefer to believe that our universe is one of a vast, and perhaps infinite, number of parallel universes, all with different laws and constants. We just happen to exist in the one that has the right conditions for us.

In the eyes of skeptics, the multiverse theory is the ultimate violation of Occam's Razor, the principle that entities should not be multiplied unnecessarily. But even so, it does not succeed in getting rid of God. An infinite God could be the God of an infinite number of universes.

Here on Earth we are facing climate change, great economic uncertainty, and cuts in science funding. Confidence in materialism is draining away. Its leaders, like central bankers, keep printing promissory notes, but it has lost its credibility as the central dogma of science. Many scientists no longer want to be 100% invested in it.

Materialism's credit crunch changes everything. As science is liberated from this nineteenth-century ideology, new perspectives and possibilities will open up, not just for science, but for other areas of our culture that are dominated by materialism. And by giving up the pretence that the ultimate answers are already known, the sciences will be freer -- and more fun.

[End Sheldrake]

**Spirkin, Alexander**, *Dialectical Materialism, Chapter 3. Consciousness of the World and the World of Consciousness. The Material and the Spiritual* (1983)

<https://www.marxists.org/reference/archive/spirkin/works/dialectical-materialism/ch03-s02.html>

Spirkin:

...Such is a brief summary of the material processes that generate mental activity, consciousness, but these material processes should not be identified with the content of consciousness. The world of consciousness is a spiritual, intellectual phenomenon.

...Dialectical-materialistic thought aims at overcoming the two extremes of dualism and identification of the mental and the physiological.

Some scientists, carried away by analysis of the physiological processes forming the basis of mental phenomena, are inclined to regard these processes as the ultimate basis and essence of the mental itself. They imagine that the study of consciousness can be limited to analysis of the physiological aspect of the problem. In the history of science numerous attempts have been made to get rid of the category of the ideal. If thought is inseparable from thinking matter, and is its product, ran the argument of vulgar materialism, then is not thought merely a form of matter? Another school of vulgar materialism regarded the mental as a particularly refined energy that hovers about somewhere in the universe. Some of them have even assumed that all energy is of a mental nature, that the world of the mind with its subjective form of the ego is merely a form of universal energy. This is how some people try to explain "parapsychological" phenomena, not taking into account the fact that although mental activity does possess the element of energy it cannot be reduced to that one element.

...Consciousness is always connected with neurophysiological processes and does not exist outside these processes. But they are not what constitutes its essence. Science will undoubtedly one day "reduce" mental phenomena to the biochemical and energo-informational processes in the brain. But this will not explain the essence of consciousness, although the connection between the spiritual and the material will be understood in greater depth and subtlety. It would appear that the building of sensory and conceptual models in the human brain, when it reflects what exists or constructs what should exist, that is, sets an aim, is connected with bioenergo-informational phenomena. In its material fabric mental activity is bioenergo-informational and at the same time it is a spiritual image of existing or potential reality. This is why it can perform not only its reflective-constructive but also its regulative role in the system of the organism and in the relations between the organism and the surrounding world.

**Tafarella, Santi**, *Promissory Materialism and Second Coming Messianism?* (2009)

<http://santitafarella.wordpress.com/2009/10/01/promissory-materialism-and-second-coming-messianism/>

Tafarella:

This struck me as a provocative way to frame materialism v. dualism. It comes from a [2003 paper](#) in *NeuroQuantology*, and it was written by Donald Watson and Bernard Wilson:

The "psychophysical identity" proposition is today's most popular model for working around the classical mind-body problem. It replaces dualism with material monism. Under the psychophysical identity proposition, mind is an unnecessary concept because mind states are actually brain states. Noting that Popper (Popper and Eccles, 1977) characterizes the psychophysical identity model as "promissory materialism," [Sir John] Eccles attacked this proposition thus:

I regard this theory as being without foundation. The more we discover scientifically about the brain the more clearly do we distinguish between the brain events and the mental phenomena and the more wonderful do the mental phenomena become. Promissory materialism is simply a superstition held by dogmatic materialists. It has all the features of a Messianic prophecy, with the promise of a future freed of all problems—a kind of Nirvana for our unfortunate successors. (1994)

[Sir John] Eccles didn't need to stop with characterizing promissory materialism as dogma. He could have used a scientific argument. Unlike the parallel-dualism premise, material monism implies a testable hypothesis, namely that local brain operations are necessary for all mental events. Had Eccles included nonlocal parapsychological findings among our "wonderful mental phenomena," he could have shown that material monism's essential implication has been falsified. The brain is not necessary for valid empirical data pointing to what Dossey labeled the "nonlocal mind" (1997), including telepathy (Bem and Honorton, 1994), psychokinesis (Jahn, et al, 1987), remote viewing (Targ, 1996), and many other nonlocal parapsychological phenomena (Radin, 1997)... "Does the self survive death?" The Theory of Enformed Systems predicts that Sir John's discarnate SELF has now answered that question empirically, i.e., from his own experience. [End Tafarella]

JK: Concluding with nuclear physicist **Edwin C. May**, head of the remote viewing Star Gate program (1985-1995) at Stanford Research Institute (SRI). May suggests that consciousness has played a tiny role in the history of the universe. It cannot be "the fundamental" (personal communication). I would argue, expanding on that, that philosophers' theories similarly have played a tiny role in the history of the universe. Can the meager ideas of tiny and ephemeral creatures somehow capture the "reality" of the unimaginably vast universe? A Theory of Everything (TOE) is an illusion. Further, what makes one think that mere propositions (verbal assertions) should be able to grasp a highly nonverbal universe?

### **Additional References in the Materialism/Idealism Debate**

Wikipedia:

<https://en.wikipedia.org/wiki/Materialism> (excerpts)

Contemporary [analytic philosophers](#) (e.g. [Daniel Dennett](#), [Willard Van Orman Quine](#), [Donald Davidson](#), and [Jerry Fodor](#)) operate within a broadly physicalist or [scientific materialist](#) framework, producing rival accounts of how best to accommodate the [mind](#), including [functionalism](#), [anomalous monism](#), and [identity theory](#).

...With the advent of quantum physics, some scientists believed the concept of matter had merely changed, while others believed the conventional position could no longer be maintained. For instance Werner Heisenberg said "The ontology of materialism rested upon the illusion that the kind of existence, the direct 'actuality' of the world around us, can be extrapolated into the atomic range. This extrapolation, however, is impossible...atoms are not things." Likewise, some philosophers [which?] feel that these dichotomies necessitate a switch from materialism to physicalism. Others use the terms "materialism" and "physicalism" interchangeably.

...Some scientific materialists have been criticized, for example by Noam Chomsky, for failing to provide clear definitions for what constitutes matter, leaving the term 'materialism' without any definite meaning. Chomsky also states that since the concept of matter may be affected by new scientific discoveries, as has happened in the past, scientific materialists are being dogmatic in assuming the opposite.

**Andreas Sommer**, *Psychical Research in the History and Philosophy of Science*

...it is not widely known that psychologists like **William McDougall**, **Gardner Murphy** and **Hans Eysenck** openly advocated psychical research (e.g. Sommer, 2013a, Introduction)

**Hans Berger**'s development of the electroencephalogram (EEG) was driven by what he believed was a dramatic 'crisis telepathy' experience involving his sister (Kramer, 2013; Millett, 2001)

**Kurt Gödel** became convinced of the reality of telepathy after conducting experiments with his wife (Dawson, 1997, pp. 29-30)

**Wolfgang Pauli** saw a link between quantum mechanics and 'poltergeist'-style mind-matter interactions he was said to have experienced (Enz, 2002; Meier, 2001)

**Albert Einstein** expressed his conviction that telepathy "deserves the most earnest consideration, not only of the laity, but also of the psychologists by profession." (Einstein, 1962)

**Hans Hahn** (a vice president of the Austrian Society for Psychical Research) and **Rudolf Carnap** [two members of the Vienna Circle] were keenly interested in psychical research (much to the chagrin of Wittgenstein – see Carnap, 1963, p. 26; Neurath & Cohen, 1973, p. 43)

...these examples are no mere anachronisms or eccentricities, but demonstrate that serious interest in so-called psychic phenomena has endured in sometimes eminent members of scientific communities.



## **PART TWO**

### **Consciousness and Remote Viewing**

## Chapter 8 What is Remote Viewing?

Let's move on from materialism, idealism and consciousness to remote viewing, which has something to say -- a good deal actually -- about these fundamental issues.

What is remote viewing anyway? In a sentence, it has been likened to a mental martial art, enabling individuals to acquire information outside what we think of as the everyday boundaries of space and time.

### I'll begin with my involvement with remote viewing

There are many accounts in print and numerous videos about the early days of remote viewing and the subsequent history. For a change of pace, I will begin with how I became a remote viewer.

I first encountered the subject browsing in a bookstore about 35 years ago when I came across a small paperback called *Natural ESP - A Layman's Guide to Unlocking the Extra Sensory Power of Your Mind*. The author was someone named Ingo Swann and it cost only \$2.98 at Half Price Books. I bought it, read it and found it quite interesting. I had heard about ESP -- and here it was! There were exercises to try, so I did. Later I undertook what is called an "outbender." My wife and I were going to vacation in Isla Mujeres in Mexico and my mother was living with us in Oakland. At a prearranged time my mother was to concentrate on something and I would try to draw it. At the agreed on time she focused on something and I started to draw. What I drew was a simple outline which resembled a cup. Turns out that is what my mother had been looking at -- her coffee cup. (Wow, it worked!)

I set remote viewing aside for several years since my wife and I were very busy raising our family, and then in 1999 I attended a conference called New Science and Ancient Wisdom in Berkeley, California. A woman named Prudence Calabrese spoke and discussed the history of remote viewing. She challenged us to try to draw a target in an envelope. A few people in the audience were able to do it -- I was impressed. During the spring and summer of 2000, I searched online to find out more about her group, TransDimensional Systems (TDS). I had learned a little about RV back in 1996, but I was out of the loop -- I hadn't taken part in the remote viewing bulletin boards that had sprung up. But I did hear about a secret government-sponsored research program that had gone on for 20 years at a cost of about \$20 million -- project Star Gate. Who knew?

Names that kept coming up online included researchers Hal Puthoff and Russell Targ at Stanford Research Institute, and viewers Ingo Swann, Pat Price and Joe McMoneagle -- the best of the early practitioners. A remote viewing book called *Psychic Warrior* got a lot of attention so I read that and also two books by an Emory University professor, Courtney Brown. The latter devoted considerable attention to something called the Galactic Federation as well as to Martians and UFOs. I believed UFO's were real, but Professor Brown took it well beyond that.

Pru Calabrese was offering a beginner's course so I signed up, enjoyed it and enrolled in her intensive training program. After several months, three of us from the "Bananaslam" training group were selected to be Interns. From that point on I remote viewed, was one of the teachers for the next group of students, undertook analysis and project management, and eventually became

the training coordinator. All the while Pru and the team were remote viewing for business clients while teaching quite a few students in two different programs. In addition, TDS took part in anti-terror work for the FBI after 9-11. Things seemed to be going very well for a couple of years, but then suddenly Pru shut down TDS and we were left hanging. I have written about the closure and my three years with TDS in my book, *Remote Viewing from the Ground Up* (2017).

<https://www.amazon.com/Remote-Viewing-Ground-Jon-Knowles/dp/1546702156>

Let's explore a bit more about what remote viewing is – the acquisition of information which is beyond what our senses are thought capable of. In RV you can get accurate information, hard as it may be to believe, from the past, present or future, and from places far removed from the location of the remote viewer.

An analogy: RV is a kind of “mental radio.” This is the title of a book by socialist Upton Sinclair about the experiments he and his wife conducted in which she would attempt to draw what someone in another room or house had drawn. These were simple outline drawings and cartoon-like figures. Many were amazingly accurate. Albert Einstein was so impressed he wrote a Preface for Upton Sinclair:

I have read the book of Upton Sinclair with great interest and am convinced that the same deserves the most earnest consideration, not only of the laity, but also of the psychologists by profession. The results of the telepathic experiments carefully and plainly set forth in this book stand surely far beyond those which a nature investigator holds to be thinkable. On the other hand, it is out of the question in the case of so conscientious an observer and writer as Upton Sinclair that he is carrying on a conscious deception of the reading world; his good faith and dependability are not to be doubted. So if somehow the facts here set forth rest not upon telepathy, but upon some unconscious hypnotic influence from person to person, this also would be of high psychological interest. In no case should the psychologically interested circles pass over this book heedlessly.

- A. Einstein (May 23, 1930)

Psychologist William McDougall was also impressed:

Mrs. Sinclair would seem to be one of the rare persons who have telepathic power in a marked degree and perhaps other supernormal powers. The experiments in telepathy, as reported in the pages of this book, were so remarkably successful as to rank among the very best hitherto reported. The degree of success and the conditions of experiment were such that we can reject them as conclusive evidence of some mode of communication not at present explicable in accepted scientific terms only by assuming that Mr. and Mrs. Sinclair either are grossly stupid, incompetent and careless persons or have deliberately entered upon a conspiracy to deceive the public in a most heartless and reprehensible fashion. I have unfortunately no intimate personal knowledge of Mr. and Mrs. Sinclair; but I am acquainted with some of Mr. Sinclair's earlier publications; and that acquaintance suffices to convince me, as it should convince any impartial reader, that he is an able and sincere man with a strong sense of right and wrong and of individual

responsibility. His record and his writings should secure a wide and respectful hearing for what he has to tell us in the following pages.

A prime example of remote viewing success in the Star Gate project was the viewing by former police commissioner Pat Price and New York artist Ingo Swann of a rural site in West Virginia, which turned out to be a top secret installation run by the National Security Agency. The target that a CIA officer chose was his summer cottage, but the nearby clandestine NSA site, which the officer was not aware of, stood out to the viewers. The viewers had not been told what the target was -- only that it was a location. Shocking even the researchers, Price was able to provide the titles of file folders at this secretive NSA facility. This startling success led to a prompt investigation of the Stanford Research Institute (SRI), which was sponsoring the research. The CIA and NSA officials believed there had to be a leak -- but there wasn't. Over the succeeding months, intelligence officers sent to check out the project at SRI saw with their own eyes that remote viewing was real.

The psychic abilities demonstrated in remote viewing are not a brand-new skill. Practitioners have been claiming such abilities throughout human history. What is new is that the U.S. intelligence agencies developed a strong interest in psychic matters (psi) in the early 1970's upon learning that the Russians had been exploring this field. The fear of Russian Communists developing powerful psychic methods motivated the CIA and others to approach Harold (Hal) Puthoff of the Stanford Research Institute upon learning of experiments SRI was conducting.

*Research Proposal* by Dr. H. E. Puthoff (1971, unpublished)

Recent experiments in parapsychology, especially in the Soviet Union and Czechoslovakia, have indicated anew that sufficient evidence exists to warrant serious scientific investigation.

Experiments in telepathy, psychokinesis (PK), etc., are now being conducted with sufficient rigor in scientific laboratories [in the Soviet Bloc countries] to indicate the possibility of developing not just a catalogue of interesting events, but rather a pattern of cause-effect relationships of the type that lends itself to analysis and hypothesis in the forms we are familiar with in the physical sciences.

### **How the Stanford Research Institute became involved**

Ingo Swann, a New York painter and psychic, had been working with the American Society for Psychical Research (ASPR) in New York City and his abilities had become known to Hal Puthoff. Puthoff invited Swann to come to SRI in Northern California so that they could conduct trials. Once there Swann performed the amazing feat of moving a recording needle of a buried and highly-shielded magnetometer, to the shock and dismay of researchers who were present.

From that point on SRI conducted quite a few experiments, including the outbender type mentioned earlier. The outbender experiments were quite successful and the CIA wanted to evaluate the possibility of operational work. So members of the CIA would come to Palo Alto and the experimenters would at times be asked to try RV for themselves. Sometimes they succeeded.

The experiences of the visitors shook them up so much, it was said, they needed to put down “eight martinis” at a bar to come to terms with their existential shock. Appropriately, *Eight Martinis* is the name of the remote viewing magazine published by present-day viewer Daz Smith (who is featured in Chapter 10).

<http://www.eightmartinis.com/>

The CIA provided funding for SRI to conduct further experiments and during the two decades the Department of Defense project existed, numerous intelligence operations were undertaken. These included:

1. Possible nuclear underground test facility (P.NUTS), USSR - 1975
2. Planned nuclear event (China) - 1979
3. Aircraft Search (Africa) - 1978
4. Submarine Prediction (Severodvinsk Building 402, USSR) - Sep 1979, March 1989
5. Foreign Consulate Facility - 1980
6. Message Coding Method (S. Africa) - 1980
7. Iran Hostage (Queen) - 1980
8. General Dozier Search - 1982
9. Lt. Col. Higgin Search and other hostages - Feb 1988 and later
- 10a Predictions: US Ship attack - 1987
- 10b Possible Libyan Response to Charge that Rabta was making CW products - 1989
11. Ship Locations - Florida Ports - 1988
- 11a Ship Locations - Pacific area -1988
- 11b Ship Locations - North Atlantic area (no date)
12. Fugitive Location - 1989
13. “N.S.” Case - 1989
14. Special Project (Central America) - 1989
15. Libyan PLO Building - 1989
16. Iran Embassy in Beirut - 1989
17. Dushanbe, USSR - 1987
18. Kamenogorsk Facility 2, USSR - 1988
19. Gomel, USSR - 1987

Source: Operational Project Summary, Table 1 (Edwin C. May Collection, Rice University)

One notable success was #3 - locating a Russian plane missing in the jungles in Africa. President Jimmy Carter announced to the press that the plane had been recovered by “psychics,” who were in fact Star Gate remote viewers.

As can be seen from the Table, many operations involved spying on the Soviet Union: Soviet tank production, its anti-ballistic missile system, an oil field complex, the launch of a new type of submarine, an underground nuclear test, development of a Russian “Stealth bomber” and Soviet R&D. Other targets included a Chinese nuclear test, a suspected bioweapons storage site in East Germany, the crash of Pan Am Flight 103, the condition of hostages Queen, Higgins, and Dozier; the Iraqi Exocet attack on the USS Stark, the location of a fugitive US agent, interdiction of drug shipments headed for US ports and descriptions of numerous buildings and persons of interest. In short, there was a long-term operational “psychic spying” program run by the U.S. government.

Some of the operations were deemed successful, but feedback was often not given to SRI for security reasons so we do not have an specific count. Some operations were deemed not useful operationally, and some were badly tasked -- according to Dr. May and Dr. Sonali Bhatt Marwaha, authors of the monumental *The Star Gate Archives*. Dr. May was head of the Star Gate project from 1985 to its close in 1995.

<https://www.amazon.com/Star-Gate-Archives-Government-Sponsored/dp/1476667527>

In the early 1990's the existence of Star Gate was leaked to the public by a member of the Ft. Meade team, and since 1995 the skill has been taught and practiced by thousands of civilians. A small industry devoted to teaching remote viewing has cropped up, and a few companies have been formed to service business and other clients. However, it has proved quite difficult to maintain a paying remote viewing business; success has been elusive except for a very few companies and individuals with solo businesses.

One has to wonder -- Is this inexpensive, path-breaking skill still used by the US intelligence agencies? One hint comes from the "father of remote viewing," Ingo Swann, who said that he had trained two teams of remote viewers. The first was the small group at Ft. Meade, Maryland, but almost nothing is known about the second team.

There is another clue: as told by celebrated UFO researcher Jacques Vallée in his autobiographical *Forbidden Science 4, Chapter 13*, p 389 (Kindle version):

San Francisco. Sunday 20 July 1997

I flew back to San Francisco with John Petersen. We discussed his new book *Out of the Blue*. He told me of having lunch recently at the Pentagon with a high-ranking officer to whom he showed Jim Schnabel's *Remote Viewers*. In walks another distinguished man, greeted warmly by his friend. Seeing the book, the man comments, 'Yeah, this is real stuff. I've got eight people doing remote viewing for me.' Thereupon his friend told John, "I should introduce you guys, this is the new director of the Defense Intelligence Agency."

So much for the story that work on military remote viewing is dead.

[End Vallée]

JK: The DIA director at the time was Lt. General Patrick M. Hughes. One would like to know more about General Hughes, who wrote a so-called "purple" paper about future military threats up to 2020. There is nothing in it, however, about intuition, remote viewing, etc.

The time frame of 1997 in Vallée account is important since Star Gate closed in 1995. Vallée's is the first solid report that remote viewing continued under government auspices after 1995.

Star Gate was phased out by the CIA, which claimed that the project had never provided useful operational information. This was plainly untrue as the 12,471 Star Gate documents released by the CIA demonstrate. Not only was the project useful, but it is difficult to conclude that the CIA,

DIA and 14 other intelligence agencies would walk away from a program which generated results good enough for them to task the Ft. Meade viewers with 450 projects involving 2738 individual remote viewing sessions between 1979 and 1995 when all that is required is a few viewers, a room, pens and paper (May and Marwaha, *Star Gate Archives, Volume 14, pages 17-18*). Also see: <https://centerlane-rv.org/op-rv-ft-meade>

In addition, The CIA, DIA (Defense Intelligence Agency) and the Foreign Technology Division (FTD)(US Air Force) tasked SRI International with 54 projects with 127 operational sessions between 1972 and 1995.

If you had any doubt that such a project was possible and that the US government undertook it, I hope the figures above remove it.

### **More on the Star Gate project methods**

In SRI's experiments and operational work, the method was natural or spontaneous remote viewing. As an example, researcher Russell Targ would sit with the viewer in the SRI offices while co-researcher Harold Puthoff drove off in a car. Puthoff had with him six envelopes, each of which designated a location. Puthoff would select an envelope randomly, open it and drive to the location indicated. Targ would talk quietly with the viewer, who drew the place Puthoff was driving to. This was called the outbounder protocol. Neither the viewer nor Puthoff knew ahead of time which site it would be, just that it would be a location within 30 minutes or so of SRI's Menlo Park offices in the San Francisco Bay Area.

As to details of how the viewer got their psychic impressions, it was a simple process. As an example, Ed May said he would tell the viewer to take all their thoughts, imagine them in a ball, crumple the ball, and throw it away. Then he would say "Target!" and the viewer would write down or say their immediate impressions of the target. There was often a monitor who would ask questions to help guide the viewer, though not himself knowing what the target was.

Ingo Swann, one of the best viewers, wondered if a method could be developed to teach people to view - the intelligence agencies were, naturally, interested. Swann submitted a proposal, it was accepted, and he and Hal Puthoff became the primary developers of what became known as Coordinate Remote Viewing (CRV).

According to one report, Ingo was sitting by the pool one day wondering how to improve remote viewing and he heard a voice in his head say, "Try coordinates." However, the standard account of how geographic coordinates originated is that Swann consulted with Jacques Vallée who suggested that an address was needed - analogous to what DARPA (Defense Advanced Research Projects Agency) had turned to in development of the Internet. Vallée had been working with DARPA (and in addition to being an astronomer and UFO researcher) was a consultant at SRI. Geographical coordinates were chosen as an "address" for remote viewing. Puthoff and Targ were flabbergasted at the idea. How could that possibly work since coordinates were manmade? Nonetheless they agreed to try it and amazingly enough many sessions described the target at the coordinates.

It was thought that perhaps the viewers were memorizing coordinates, or at least had an idea what part of the world the target was in -- and so the method might be flawed. Swann then suggested using an arbitrary set of numbers as an “address” for the remote viewing target. This too was a wild idea, but numbers were tried and they too worked. These numbers became known as the Target Reference Number (TRN), which is still part of the CRV methodology.

Swann began to develop the concepts he felt were needed to train remote viewers, based on his vast reading and experience as a psi research subject himself. With the help of Hal Puthoff, he experimented and devised stages to the process. Over time a set of six stages emerged and these were tested with a handful of students from the remote viewing unit at Ft. Meade, Maryland. The result was called Controlled Remote Viewing (CRV).

Controlled Remote Viewing is thus a second form of remote viewing, in contrast with the natural or spontaneous method used at SRI. CRV is highly structured and as taught today has six stages (whereas natural remote viewing does not employ stages at all). Because of its systematic approach, it is often referred to as “method” RV -- as are numerous offshoots such as TransDimensional RV (TDRV), Technical RV (TRV) and Scientific RV (SRV).

As noted, a massive definitive history of “Star Gate” has been written by Edwin May and Sonali Bhatt Marwaha. The four volumes present the huge number of experiments and reports undertaken, all under heavy Congressional and scientific oversight.

*The Star Gate Archives* (Vol. 1), *Reports of the United States Government Sponsored Psi Program, 1972–1995*. Volume 1: Remote Viewing, 1972–1984  
<https://mcfarlandbooks.com/product/the-star-gate-archives/>

### **Theories of remote viewing**

Since remote viewing was developed in the early 1970s, there have been many attempts to try to understand the physics, chemistry, neurology and psychology that make it possible to get this “impossible information” from the present, past, future and from distant places. To date there is no accepted scientific theory of how this happens.

Remote viewing is not yet a science -- because it lacks an established theory that explains the physical basis on which it works. In seeking to find a scientific basis for RV, researchers and practitioners have turned to quantum mechanics, holography, and other scientific disciplines. Quantum mechanics is of particular interest because of a feature known as non-locality. That is when two particles are sent a great distance in opposite directions and one is observed to have a certain “spin”, the other automatically has the complementary “spin”, even though there is no known transmission of information between the two.

This is suggestive for RV because, as noted, viewers get information from far away -- as far as Jupiter, in fact. The target might be across town or perhaps several thousand miles away. In one famous instance, Ingo Swann remote viewed the planet Saturn before the NASA satellite arrived there. He reported they would find rings, although no one thought that Saturn had rings. Jupiter



did, but Saturn? But when the spacecraft arrived rings were indeed found -- and other details provided by Swann were corroborated.

Russell Targ and Elisabeth Rauscher published one of the more developed theories about the scientific basis for remote viewing.

**Rauscher, Elisabeth and Targ, Russell**, *Investigation of a Complex Space-Time Metric to Describe Precognition of the Future* (2001)

<https://pdfs.semanticscholar.org/0c48/a829698736db3f00025ffd11a9754ab10a23.pdf>

**Abstract.** For more than 100 years scientists have attempted to determine the truth or falsity of claims that some people are able to describe and experience events or information blocked from ordinary perception. For the past 25 years, the authors of this paper - together with researchers in laboratories around the world - have carried out experiments in remote viewing. The evidence for this mode of perception, or direct knowing of distant events and objects, has convinced us of the validity of these claims. It has been widely observed that the accuracy and reliability of this sensory awareness does not diminish with either electromagnetic shielding, nor with increases in temporal or spatial separation between the percipient and the target to be described. Modern physics describes such a time-and-space independent connection between percipient and target as nonlocal. In this paper we present a geometrical model of space-time, which has already been extensively studied in the technical literature of mathematics and physics. This eight-dimensional metric is known as "complex Minkowski space," and has been shown to be consistent with our present understanding of the equations of Newton, Maxwell, Einstein, and Schrödinger. It also has the interesting property of allowing a connection of zero distance between points in the complex manifold, which appear to be separate from one another in ordinary observation. We propose a model that describes the major elements of experimental parapsychology, and at the same time is consistent with the present highly successful structure of modern physics.

Ken Renshaw on Minkowski 8D space.

<https://www.forewordreviews.com/reviews/science-remote-viewing-and-esp-review.pdf>

**Another interpretation – Marty Rosenblatt**

[http://p-i-a.com/Magazine/Issue24/Connections\\_24.html](http://p-i-a.com/Magazine/Issue24/Connections_24.html)

JK: Marty Rosenblatt is a physicist and a long-time researcher in Associative Remote Viewing, which is an application of RV. The present author co-wrote a volume on ARV with Debra Lynne Katz, Ph.D. <https://www.arvbook.com/>

Rosenblatt:

The nature of consciousness and its place in the universe remain mysterious. Classical models view consciousness as computation among the brain's neurons but fail to address its enigmatic features. At the same time quantum processes (superposition of states, nonlocality, entanglement.) also remain mysterious, yet are being harnessed in revolutionary information technologies (quantum computation, quantum cryptography and quantum teleportation). A relation between consciousness and quantum effects has been pondered for nearly a century, and in the past decades quantum processes in the brain have been invoked as explanations for consciousness and its enigmatic features. Critics deride this comparison as a mere "minimization of mysteries" and

quickly point out that the brain is too warm for quantum computation which in the technological realm requires extreme cold to avoid "decoherence", loss of seemingly delicate quantum states by interaction with the environment. However quantum computation would surely be advantageous from an evolutionary perspective, and biology has had 4 billion years to solve the decoherence problem and evolve quantum mechanisms. Furthermore recent experimental evidence suggests quantum nonlocality occurring in conscious and subconscious brain function, and functional quantum processes in molecular biology are becoming more and more apparent. Moreover macroscopic quantum processes are being proposed as intrinsic features in cosmology, evolution and social interactions. Following the first "Quantum Mind" conference held in Flagstaff at Northern Arizona University in 1999, "Quantum Mind II" will update current status and future directions, and provide dialog with skeptical criticism of the emerging paradigm.

JK: Marty Rosenblatt cites two models: Jahn's M5 model and the Watson, Schwartz, Russek Theory of Enformed Systems

[http://p-i-a.com/Magazine/Issue14/Intuition\\_14.htm](http://p-i-a.com/Magazine/Issue14/Intuition_14.htm)

"Enformy is the capacity to organize; that is, enformy is to organization as energy is to work." Marty also cites Link theory and Cramer's Transactional Interpretation (TI) of Quantum Mechanics.

### **A third approach - May and Marwaha**

**May, Edwin and Marwaha, Sonali**, *The Multiphasic Model of Precognition: The Rationale* (2015)

<https://www.proquest.com/openview/0a53364973770acb4cd0ffe4064559e2/1?pq-origsite=gscholar&cbl=42308>

**ABSTRACT:** Precognition is defined as an atypical perceptual ability that allows the acquisition of noninferential information arising from a future point in space-time. Despite the controversies, there is sufficient empirical evidence for the validity of the phenomenon. The multiphasic model of precognition (MMPC) is capable of addressing the experimental data. The MMPC identifies two distinct phases: The physics domain (PD) addresses the question, "How is it possible for information to traverse from one space-time point to another?" We suggest that the solution might be found within entropic considerations. The acquisition and interpretation of retrocausal signals from a future point in space-time is via three stages in the neuroscience domain (ND): Stage 1, perception of signals from an information carrier, which is based upon psychophysical variability in a putative signal transducer; Stage 2, cortical processing of the signals mediated by a cortical hyper-associative mechanism; and Stage 3, cognition, which is mediated by normal cognitive processes that lead to a precognitive response. The model is comprehensive, brain-based, and provides a new direction for research, requiring multidisciplinary expertise. In this article, the authors present the MMPC and discuss the rationale for the hypotheses put forth for the PD and the ND.

<https://carloalvarado.wordpress.com/tag/precognition-sonali-marwaha-edward-may/>

May and Marwaha:

In our view, the person-centric experience of precognition is a manifestation of the fundamental problem of information-centric retrocausal signals. Thus, we view the experience of precognition as a process rather than an event. The MMPC is a signal-based, process-oriented model designed

to determine the causal mechanisms leading to the experience of precognition. The MMPC identifies two distinct phases:

Phase I: The Physics Domain (PD), addresses the question of retrocausation and how it is possible for information to traverse from one spacetime point to another. We suggest that the solution might be found within entropic considerations.

Phase II: The Neuroscience Domain (ND), addresses the acquisition and interpretation of retrocausal signals. We propose that this occurs across three stages:

Stage 1: perception of signals from an information carrier, based on psychophysical variability in a putative signal transducer.

Stage 2: cortical processing of the signals, mediated by a cortical hyper-associative mechanism; and

Stage 3: cognition, mediated by normal cognitive processes, leading to a response based on retrocausal information. Based on research data, the MMPC addresses both the PD and the ND by considering the well-established laws of the physical world and what we currently know—and will know—about brain–behavior relationships. Thus, the MMPC is a coherent assimilation of existing concepts that we believe can lead to understanding the *process* of retrocausation-precognition—from the point of information origin to cognition. According to the MMPC, precognition is an inherent, similar to musical ability, arising out of individual differences in brain connectivity. Thus, one cannot train to *acquire* the ability. Based on the model, we define precognition as an *atypical perceptual ability that allows the acquisition of non-inferential information arising from a future point in spacetime*. The model is comprehensive, brain-based, and provides a new direction for research requiring multidisciplinary expertise.

### **Combatting the sceptics**

The first thing that skeptics who know little about the program bring up is that the CIA ended the Star Gate project in 1995 with a highly negative report, the AIR report. What they don't say is that this was soundly rebutted by two participants in the program: Edwin C. May, Head of the Star Gate project 1985-1995 and Paul H. Smith, a remote viewer at Ft. Meade, Maryland.

**May, Edwin C.**, *The American Institutes for Research Review of the Department of Defense's STAR GATE Program: A Commentary* (1996)

[https://www.scientificexploration.org/docs/10/jse\\_10\\_1\\_may.pdf](https://www.scientificexploration.org/docs/10/jse_10_1_may.pdf)

**Smith, Paul H.**, *A Review of the CIA/AIR Report, An Evaluation of Remote Viewing: Research and Applications* by "Mr. X" (Paul Smith), *Bologna On Wry*.

[https://www.reddit.com/r/a:t5\\_k7e7q/rising/](https://www.reddit.com/r/a:t5_k7e7q/rising/)

<https://www.anomalist.com/commentaries/ciarv1.html>

Wikipedia is a very widely used resource for information. Readers of the Sourcebook may have first heard about remote viewing from Wikipedia. Unfortunately, Wiki has a squad of editors who prevent accurate and honest reporting about parapsychology in its pages. The very entry on remote

viewing is flawed and attempts to correct it are beaten back. Russell Targ, who co-founded the remote viewing research at SRI, cannot get an true and authentic biography posted on the site.

As a result, remote viewers have had to cite a Wiki description of remote viewing by Paul H. Smith from 2007, one that was accurate but was edited out of existence!

[https://en.wikipedia.org/w/index.php?title=Remote\\_viewing&oldid=153992313](https://en.wikipedia.org/w/index.php?title=Remote_viewing&oldid=153992313)

Articles exposing Wiki’s bias against psi:

<https://www.quora.com/Is-Wikipedia-biased-against-parapsychology>

[https://jcom.sissa.it/article/pubid/JCOM\\_2002\\_2021\\_A09/](https://jcom.sissa.it/article/pubid/JCOM_2002_2021_A09/)

<https://paranormaldailynews.com/wikipedia-skepticism/2879/>

<https://www.amazon.com/Psi-Wars-Wikipedia-Battle-Internet/dp/1786771179>

<https://wikipedia20.mitpress.mit.edu/pub/u5vsaip5/release/8>

Given Wikipedia’s distorted coverage of remote viewing, **remoteviewing.link** provides a valuable service, with reliable information and curated links to online communities, organizations, publications, research, training, targets, examples, businesses and more.

<https://remoteviewing.link/>

### Surveys of Remote Viewers

Daz Smith and the editors of RV reddit conducted two informal surveys of methods used by remote viewers.

RV Method	Daz *	%	Discord *	%
Controlled RV (CRV)	98	50.2	103	41.3
Technical RV (TRV)	16	8.2	15	6
Hawaii RVG (HRVG)	12	6.1	18	7.2
Extended RV (ERV)	11	5.6	22	8.8
TransDimensional Systems RV	9	4.6	23	9.2
Associative RV (ARV)	9	4.6		
Standard/Freestyle/Own	22	11.2	46	18.4**
Scientific RV (SRV)	4	2	7	2.8
Bullseye RV (BRV)			12	4.8
Consultants International			3	1.2
Dream	5			
Other	9	4.6		
TOTAL	195		249	
*Number of participants				
**Natural RV				

**Notes:** Some respondents checked more than one category.

Associative RV is not an RV method; it's an area of application of psi. Thousands of viewers have experimented with ARV and the Applied Precognition Project, which is devoted to ARV only, has 2000 members.

**Summary:** The variants of CRV (trainers Lyn Buchanan, Lori Williams, Paul Smith, et al.) are used the most, by far (50% and 41%). A variety of freestyle/natural methods comes next at 11% and 18%. These are small surveys and may not be exactly representative of the distribution of the viewers. However, there is no doubt that CRV is the most frequently used method in training and in client work as well.

A broader survey was conducted by Debra Katz and Patrizio Tressoldi.

**Debra Lynne Katz and Patrizio Tressoldi, *Remote Viewing Applications: A Survey of Present-Day RV Practitioners*, Journal of Parapsychology 2022, Vol. 86, No. 1, 135-157**

<http://doi.org/10.30891/jopar.2022.01.07>

A copy of the full survey is available at <https://www.surveymonkey.com/results/SM-XX7Y82S67/>

Key points and highlights of the survey:

106 remote viewers participated, although not all responded to every question. There were generally between 70 and 73 respondents per question.

Only respondents who had participated in real life applied/operational remote viewing projects were invited to participate.

Question: "What meditative, intuitive, or other development methods have you used prior to any RV training, if any?"

The 82 responses cited over 30 different methods and approaches ranging literally from A to Z -- from "Alan Watts meditation" approach to "Zen yoga."

"When asked what their training has been in, 66 (73.5%) responded Controlled Remote Viewing (CRV) or a derivative/similar methodology such as Scientific Remote Viewing (SRV) from the Farsight Institute, Hawaii Remote Viewers Guild Method (HRVG), Trans-dimensional Systems (TDS); 26 (29.89%) responded Extended Remote Viewing (ERV) or similar; 18 (20.69%) responded only Associative Remote Viewing (ARV); 29 (31%) responded "other methods," such as dream remote viewing, self-taught, mediumship techniques, automatic writing, and various remote viewing courses with instructors that teach a combination of methods. A few indicated they learned through watching online videos."

JK: CRV was again heavily dominant among the training methodologies. It should be noted that HRVG does not stem from CRV and is markedly different in its steps/stages. ARV is not a method per se, but is an application of RV. It uses a variety of methods, and a session is generally much shorter than a full CRV-type effort.

The survey showed that remote viewing is used in quite a variety of ways, both personal and for clients or pro bono. 46% had done business consulting, including investing, tariff negotiations,

marketing trends, technology choices, and “optimal trajectories.” 49% had taken part in criminal investigations, including kidnapping, missing persons, homicides, finding lost or dead people, theft, and forecasting terror attacks.

Katz and Tressoldi noted: “Even if it is impossible to know whether our sample is representative of all remote viewers who currently use remote viewing for practical applications, what emerged from their responses is that RV is used extensively and its applications span from business to scientific and intelligence applications for personal to corporate and public agencies use. Confidentiality and NDAs [Non-disclosure Agreements] were mentioned a lot.”

## Chapter 9 The Practice of Psi in Russia

Remote viewing experiments and operations were conducted not only in the United States but also in Soviet Russia. Other countries conducted psi experiments as well (see Appendix 8).

Prior to October 1917 when the Bolsheviks and Soviets came to power, Russia had a long history of mysticism in religion and in shamanism, in which paranormal phenomena were omnipresent. To take advantage of this history, the Marxist Soviet government sent emissaries to eastern Russia to try to win support from the oppressed peoples there -- to the promises of a glorious life under the new Soviet state. In one such episode, adventurer Nicholas Roerich traveled to western Mongolia, with Lenin's blessing and tried to convince the Oirat people that Vladimir Lenin embodied the return of Oirat, their long-sought idol. Continuing the theme, Roerich tried to pass himself off as the Dalai Lama in Tibet.

Did Lenin and the Bolsheviks actually approve psychic research? There was indeed early psi research in the 1920's under the Soviets. A member of the Bolshevik secret police, cryptographer Gleb Bokii (or Boky) even became involved in esoteric endeavors.

(See Znamenski, Andrei, *Alexander Barchenko: Budding Red Merlin and His Ancient Science; Engineer of Human Souls: Bolshevik Cryptographer Gleb Bokii*)

With the breakdown of the Czarist order and amid the ferment that burst forth after the October revolution in 1917, Professor L.L. Vasiliev was able to conduct research on telepathy and clairvoyance. His studies were undertaken in the 1920's but they were not published until 1959. Similar research went on in the 1930s and 1940s, but for the most part *sub rosa*, since a rigid form of Marxism dominated the country in the Stalin decades. Even three years after Stalin's death in 1953, telepathy was termed idealist and anti-social by the Soviet Encyclopedia. However once Nikita Khrushchev became Premier, restrictions were loosened and research was again permitted. The change reportedly stemmed from a 1995 visit by Khrushchev to India in which he witnessed yogis emerge alive after being buried underground for several days.

The term "remote viewing" was coined in the early 1970's in the United States, but parapsychological research in Russia had begun many decades earlier. In the era of "perestroika" (1985-1991) terms like "psychotronics" and "bio-communication" were used to give the studies a Marxist gloss. The Russian researchers also focused on physical devices for the same reason.

Author Martin Ebon (*Psychic Warfare: Threat or Illusion?*) describes three periods of parapsychology research. The first was the "golden age" of Soviet parapsychology during the 1960s. It began with Vasiliev's advocacy of the research he had undertaken thirty years previously and had then been allowed to resume. The second stage began in about 1968, but by 1970 contact between Soviet parapsychologists and colleagues abroad had begun to dry up. A third period in Soviet parapsychology occurred in the 1970s.

On November 12, 1982, Yuri Andropov was named General Secretary of the Communist Party of the Soviet Union, succeeding Leonid Brezhnev. Research became much harder to do after Andropov took control of the KGB, which at times did however monitor and supervise

experiments. As we will see, surprisingly, it was KGB Generals who headed the Russian remote viewing program.

Several Russian psychics became famous in the second half of the 20<sup>th</sup> century, Nina Kulagina being perhaps the best-known. Her name became familiar in the West from the account in Ostrander and Schroeder's popular *Psychic Discoveries Behind the Iron Curtain*. Kulagina was reported to be able to see with dermo-optic vision (that is, with parts of her body) and to move objects with her mind (psychokinesis - PK). In one video she strains mightily to move a cylinder -- and becomes physically exhausted from the attempt.

<https://consensus.co.uk/debates-archive/the-woman-who-could-move-objects-with-her-mind/>

J.G. Pratt, a U.S. parapsychologist, made six trips to Russia to test Nina Kulagina's reported ability to read with her fingertips. However, he was unable to set up an experiment that met his conditions and so never achieved even one truly scientific trial.

Two further examples of psi, while not as exotic as psychokinesis or mind reading, are noteworthy because success with alphanumeric was claimed. Alphanumeric refers to words and numbers, a subject in which the US Star Gate project did not make significant headway. While remote viewers can elicit information about tangibles such as people, objects and events, numbers and words have proven elusive, although there have in fact been a few successes.

Karl Nikolayev (an actor) and Yuri Kamensky (a biophysicist) were stars on the Russian psychic scene. One of their feats involved using a "short outburst of emotion" to form an equivalent of Morse code. Kamensky while in Moscow transmitted code for the word "MIG" (the Soviet jet) to Nikolayev, who was asleep in Leningrad. The code was two dashes for "m," two dots for "i" and two dashes and a dot for "g." Reportedly changes in Nikolayev's heart rate corresponded with Kamensky's message.

Another alphanumeric experiment involved a husband-wife team, Yuri Korabel-nikov and Ludmilla Tishchenko-Korabelnikova. They undertook more than eight thousand clairvoyance tests and in one of them geometric designs and numbers were placed inside opaque envelopes. Reportedly the two psychics were able to name about 70 percent of the images or numbers correctly, compared to 20 percent expected by probability.

The most information available in English about the Russian remote viewing projects stems from trips by 1) TV reporter and UFO researcher George Knapp; 2) Stanford Research consultant and UFO researcher Jacques Vallée, and 3) Dr. Ed May, researcher Larissa Vilenskaya, and Ft. Meade viewers Joe McMoneagle and Angela Ford.

In 1991, May and Vilenskaya made a two-month visit during which they met with many of the researchers in the Russian program. In the 1990s May, McMoneagle and Ford were able to compare notes with the scientists in charge of the program. This is set forth in fascinating detail in May, Rubel and Auerbach, *ESP Wars East and West: An Account of the Military Use of Psychic Espionage as Narrated by the Key Russian and American Players*. General Alexei Savin and Major General Nikolai Sham, Deputy Director of KGB (Ret.) were two of the primary players on the Russian side.



*ESP Wars* contains a wealth of belief-challenging claims and it details many instances of Russian remote viewing operations. Examples include

- freeing 50 hostages from a hijacker in Baku.
- learning design details of American military satellites and basic information about the pilots in American military jets.
- finding out what went wrong in the 2002 Kursk submarine disaster.
- predicting earthquakes in Kamchatka.
- locating boats on a map with precision.

In fact, “ESP proved to be more successful in investigating crimes than the entire investigative branch of the KGB.” This led to the creation of commercial businesses about climate and anti-terror issues (missing ships and planes).

Another revelation:

Unlike remote viewers in the US who were kept from harm’s way, the Russian viewers were on the front lines in the Chechnya campaign, and as such, required combat training in weapons, hand-to-hand combat and knowledge and skill at handling large military systems. When May asked Savin what about ‘remote’—as in remote viewing—did he not understand [sic]. From May’s perspective there was never a need to put viewers in harm’s way and keep them remote from the combat. Savin, however, said he found that it allowed the Russian viewer to focus more sharply! (*ESP Wars*, p 236 in pdf)

Or as Joe McMoneagle put it:

I was introduced to their Number One viewer, a woman named Elena Klimova, who I sensed was probably about as nervous meeting me as I was her. We later learned that she had earned a high Russian decoration for her psychic functioning during the Chechnya War, working from a front line, main battle tank. I suddenly felt like a wimp. (p 289 in pdf)

Entering into the far reaches of make-believe, KGB officer Ratnikov was said to have won a beauty contest on a cruise “Using hypnosis-like effects.” He was male.

The Russians were interested in building a “new man,” their version of the promised new Soviet man in Russia. They began by evaluating candidates based on “computerized psychological testing programs, which made it possible to evaluate the professional and personal qualities of individuals from their photographs, handwriting, signatures, and voice recordings.” (*ESP Wars*, p 263 in pdf)

They aimed to produce a human being enhanced to his or her full capabilities through an intensive holistic regimen. This included vigorous and taxing physical and mental training, a vegetarian and alcohol-free diet, and practicing techniques like automatic writing and self-hypnosis. Past life regression was undertaken to relieve viewers of the fear of death. Useful information was gained from the teams of viewers by evaluating and comparing both literal and symbolic content of

viewers' impressions. This is an extremely surprising side of the KGB, one almost unknown in the West.

### **Comparing the Russian and U.S. Remote Viewing programs**

Summing up a few of the differences between the two remote viewing programs:

The Russians claimed they were able to get better results when viewers were on site, while the Americans did much of their viewing from one building at Ft. Meade, Maryland.

The Russians claimed great accuracy, citing a figure of 75%, while Dr. May set the American figure much lower. However, precisely what was being measured is not clear enough to make a meaningful numerical comparison.

The Russians claimed that they were able to train individuals to become successful remote viewers. As noted, this was accomplished through a comprehensive program to produce a better human being -- the use of psychological tests, voice evaluation, physical and mental training, diet, etc. Dr. May held that the Americans were unsuccessful in their training and that only about 1% of the population has substantial ingrained talent. However, a method that requires training -- Controlled Remote Viewing -- is the only method used by two of the successful present-day remote viewing companies in the West. And there are only a handful of such companies. That fact contradicts Dr. May's opinion and there is other evidence as well.

Another difference is that the Russian program was much more integrated with high-ranking authorities than the US project. Russian Generals conducted the program and had a relatively free hand. By contrast, funding for the American program had to be sought from a skeptical Congress on a yearly basis. There were 16 different US intelligence agencies using the program and the agencies did not share their findings with each other, nor with the operational and research units.

### **Parapsychology experiments conducted in Eastern European countries during the Soviet period**

Following are extensive extracts from Martin Ebon's book on parapsychology in Eastern Europe. They convey the breadth and depth of the experimentation within materialist Soviet-style societies.

**Ebon, Martin, *Psychic Warfare: Threat or Illusion***

p 5 in pdf

Vladimir Lvov in Le Monde of Paris: "The truth is simple: parapsychology is not accepted as a legitimate and official branch within Soviet science. No institute or center of research in the Soviet Union is devoted to telepathy, psychokinesis, etc."

29 A report by the AiResearch Manufacturing Company of Torrance, California, prepared for the Central Intelligence Agency observed, "Russian interest in hypnosis has led to many attempts at automating hypnosis," adding: "Typical techniques are tape-recordings, rotating discs in the visual field, and application of pulsating electrical current through the head...The best-publicized hypnotist in the Soviet Union is Vladimir L. Raikov, M.D."

30 One instance of Soviet use of hypnosis was in an international setting at the 1978 world chess championship in Baguio, the Philippines. The challenger, Victor Korchnoi, tried unsuccessfully to unseat the champion, Anatoly Karpov. Korchnoi had defected from the Soviet Union, while Karpov lived in Russia and was one of the major sports assets of the Soviet state.

57 The Popov group, with Naumov acting as liaison, published an article, "Parapsychology, Science of the Future," in the weekly magazine *Literaturnaya Gazeta* (LG for short) in December 1967. Their enthusiasm, however, aroused irritation in the periodical's editorial office. The LG editors decided to duplicate the Moscow-Novosibirsk and Moscow-Leningrad experiments, using the same star telepathists, but providing their own research committee of scientists.

64 Professor Novomeisky, on the other hand, continued dermo-optic [reading with the skin] experiments at the Pedagogical Institute at Sverdlovsk. His researches were being published under the auspices of the Institute and of the Ministry of Education at Sverdlovsk. In Moscow, Larissa Vilenskaya engaged in tests along similar lines; she continued them in Israel, after her emigration from the Soviet Union in 1979, with a research grant from the Parapsychology Foundation of New York. The foundation also backed the research of Dr. Yvonne Duplessis of the Centre d'Information de la Couleur in Paris, who maintains that dermo-optic perception is not an extrasensory (ESP) function, but is based on the invisible impact of color on a subject's hands. In a paper on "Dermo-Optic Perception" in the *Parapsychology Review* (November-December 1978) Dr. Duplessis wrote that skin perception may be thermal, tactile, affective, or weight-related.

68 Officially, according to the Scientific Committee that met at the beginning of the Second International Congress on Psychotronic Research in Monte Carlo (June 30 to July 4, 1975), it is "a science which, in an interdisciplinary fashion, studies fields of interaction between people and their environment (both internal and external) and the energetic processes involved." The committee said that

Psychotronics recognizes that matter, energy and consciousness are interconnected in a way which contributes to new understanding of the energetic capabilities of human beings, life-processes and matter in general.

Is psychotronics the same as parapsychology (or psychic research)? Well, it wants to be more than parapsychology, which is pretty well restricted to telepathy, clairvoyance, precognition, and psychokinesis. Psychotronic conferences have been grab bags, providing a forum for such a wide variety of talks, papers, and brief presentations that just about anyone with a way-out subject, and the necessary carfare to get to Europe, Japan, or Brazil, could be included among the psychotronicists. Dr. Zdenek Rejdak of Czechoslovakia, President of the International Association for Psychotronic Research, worked closely with Dr. Stanley Krippner of the Humanistic Psychology Institute, San Francisco.

69 Still, among the large number of participants there have always been men and women who brought imagination in research design, careful control of experiments, and solid standards of analysis to psychotronic work. Among the most enigmatic, challenging, and puzzling experiments were those presented by Robert Pavlita and his daughter, Jana Pavlitova, of Czechoslovakia. East

European researchers have often bracketed the Pavlita demonstrations in apparent psychokinesis (or telekinesis) with those presented by Nina Kulagina in Leningrad. At the Second International Congress of Psychotronic Research, held in Monte Carlo, Mr. Pavlita presented a brief paper, "Vertical Biomagnet Field of Generator," designed to show "the influence of a biomagnetic field" on a "generator" that is contained within a cylinder.

70 The Monte Carlo congress also received a paper from Moscow physicist-parapsychologist Victor G. Adamenko, then on the staff of the National Institute of Normal Psychology. Dr. Adamenko's paper, "Psychoenergetic and Extramotor Functions of an Organism," was a theoretical analysis rather than a report on experimental work. Adamenko, who received his doctorate in physics in Minsk, rather than in Moscow - and only after much delay, allegedly because of his unorthodox interest in psychic studies - had done considerable research with Alia Vinogradava, a vivacious practitioner of homemade psychotronics, who later became his wife.

Vinogradava had seen a film of Kulagina's experiments in moving small objects by a force that looked like mind-power (psychokinesis, biomagnetism, whatever the suitable label), and proceeded to imitate it. For several years, a visit with Victor and Alia was de rigeur for Western parapsychologists on the Moscow-Leningrad circuit. Dr. Krippner has described what appears to have been a delightful social event as well as a fascinating demonstration of -- of what? of psychokinesis? of static electricity (electrostatics)? of a combination of both? In his autobiographical book, *Song of the Siren*, Krippner gives this account:

Adamenko placed a Havana cigar tube on the surface of the table. Vinogradava put her right hand to the side of the tube and it began to move across the table. When it reached the table's far side, she shifted her hand to the other side and it moved back. The tube continued to roll from edge to edge for several minutes; each time it reached the far side of the table, Vinogradava shifted her hand to the other side of the table and the tube moved back.

Adamenko then removed the cigar tube and substituted a heavier tube made from aluminum. She preceded her attempts to move this tube by picking it up and rubbing it briefly -- indicating to me that she was initiating an electrostatic charge. This charge would cause the tube to repel from her hand - through an electrostatic effect rather than PK [psychokinesis]. The aluminum tube rolled across the table in choppy movements, whereas the cigar tube had moved smoothly.

71 Psychotronics, even as defined by its proponents of the International Association for Psychotronic Research, is difficult enough to comprehend for the outsider. When its elusive capabilities are linked with the mysterious sinking of a submarine, it becomes even more complex and unimaginable. [Thomas] Bearden presented two papers, in absentia, to the Third International Congress on Psychotronic Research, which took place in Tokyo in 1977. They dealt with "Solution of the Fundamental Problem of Quantum Mechanics" and "Photon Quenching of the Paranormal (Time) Channel." An article dealing briefly with "Soviet Psychotronic Weapons" appeared in *Specula* (March-June 1978), linking U.S. research in the 1920s with current Pavlita claims and the assumed existence of an array of powerful, novel Soviet "PT weapons" (PT stands for "psychotronics").

78 Mr. Shifrin did not join the staff of the Moscow Institute for Problems of Information Transmission, but collaborated with it while he lived in Kazakhstan. Among his tasks was the testing of Central Asian psychics, including one woman physician who showed remarkable ability at remote-viewing. This psychic appeared capable of describing a secret missile site at a distance of five hundred kilometers. Three top researchers of the Moscow Institute flew to Kazakhstan to examine the psychic's capacities, as her visions concerned Soviet space exploration. Mr. Shifrin also says:

The Information Transmission institute has, since then, been broken up into several regional centers, to assure a higher degree of secrecy. But while I was able to observe its operations, I noted that telepathy and clairvoyance are even used to anticipate troop movements. During one military maneuver, one group of soldiers was ordered to capture an 'enemy' unit stationed across the river. A psychic, working for the IPPI, was brought to the base and advised the command as to where and when an attack would take place. As a result, the attacking troupes were captured as they swam across the river.

Mr. Shifrin confirmed that Soviet experimenters are using biochemical means to enhance the psychic abilities of telepathists. Soviet researchers, he said, observed that a psychic who was transmitting thoughts showed an adrenaline increase in the bloodstream, while telepathic receivers registered a decreased adrenaline level. IPPI researchers sought to increase the accuracy of telepathic transmissions by injecting Adrenaline into transmitters and giving chemical depressants to receivers.

It is not always possible to draw a clear line between what Soviet researchers attempt to accomplish and what they actually do achieve. What is one to make, for example, of the colorful rumor that the IPPI brought several "Tibetan priests" to its Moscow research center, and that these men commanded such psychokinetic powers that they were able "crack the back of a skull by thought alone"? While the accuracy of such an account may be doubted, Eastern and Western parapsychologists agree that Soviet researchers have used the services of Siberian shamans to explore psychic frontiers. Shaman is a Sanskrit word that means "ascetic," and refers to the type of religio-folkloric medium-witch doctor who can be found in much of northern and southern Asia and has links to North American Indian medicine men.

Shamans, and their real or imagined skills, have traditionally been objects of popular awe and fear. The concept of impregnating physical objects with negative bio-energetic power is a modern version of the age-old concept of the "evil eye," common in the Near East and the Mediterranean. The use of shamans in experiments, then, links folk belief with modern research aims.

79 Positive uses are envisaged for the "electro-auragram," developed by Professor Pavel Gulyaev, best known in the West as the leading follower and eventual successor of Professor Vasiliev, the noted Leningrad physiologist and pioneer psychic researcher. Gulyaev, working at the Laboratory for Physiological Cybernetics at Leningrad University, succeeded in developing an instrument that registered an electromagnetic field radiated by living organisms. Gulyaev expressed the hope that his findings would serve to "impose" the electro-auragram of a healthy person upon that of an ill person, by prompting the afflicted organism to "remember" a healthy or healing rhythm."

96 Miss Vilenskaya, conveying "Some Impressions Concerning Healing in the USSR," noted that it had previously been considered "non-scientific" to speak about psychic healing in the Soviet Union, but that "healing by biofield" and "biofield influence" were being widely discussed in relation to Dzhuna Davitashvili. Vilenskaya recalled that she had met the Georgian healer in the Moscow hotel Druzhba in April 1979. Miss Vilenskaya noted that Dzhuna's methods and ideas were not unique, but part of a tradition and technique practiced by a large number of healers, including Alexey Krivorotov and his son Victor of Tbilisi, Vladimir Safonov of Moscow, and others.

98 Another Soviet scientist, Alexander G. Spirkin, expressed similar views in several articles. Spirkin is a corresponding member of the Soviet Academy of Sciences and a philosopher who has made a special study of "bioenergy." Writing in *Sovet-skaya Rossiya* (January 6, 1980), he castigated scientists for lack of moral courage in admitting that they had found psychic phenomena genuine and had, in fact, benefitted from them. Spirkin cited the case of one "ungrateful" scientist as follows:

A scientist of very advanced years was suffering from a serious illness, which could hardly be treated at his age. In desperation, he asked for a man who had cured others by means of biofields to be brought to his sickbed. Experiencing great relief, the patient was so grateful to his 'miracle worker' that he was only too happy to do everything in his power for him. But the healer said, "I really don't need anything - except just this: Make a statement that my treatment has helped you." Hearing this, the scientist became embarrassed and replied, "How can I confirm that? I would have to explain it more fully. But I can see no explanation. So they will say that, in my declining years, I have plunged into mysticism."

102 The little band of parapsychology enthusiasts inside the Bio-Communication Laboratory was well aware that they operated under official scrutiny, that at least one KGB operative was a staff member and others regularly reported to the agency. Much of their work was clearly visible, such as the long-distance telepathy experiments, but other studies were never published. Among the unpublicized studies was the work of Yuri Korabel-nikov and Ludmilla Tishchenko-Korabelnikova, a husband-and-wife team who organized more than eight thousand clairvoyance tests. They placed different geometric designs or numbers inside opaque envelopes. According to the group's compilations, the two psychics were able to name about 70 percent of the images correctly, compared to 20 percent expected by probability.

105 The pattern that has emerged, of the KGB's rule in Soviet parapsychology is one of increasing secrecy about actual research within the USSR, accompanied by fluctuating tolerance or encouragement of the exposure of peripheral, irrelevant, or even inaccurate information concerning Soviet studies. Three stages in this process can be identified; they were influenced by the role and policies of Yuri V. Andropov, who held the post of KGB chairman from 1967 to 1982. On November 12, 1982, Andropov was named General Secretary of the Communist Party of the Soviet Union, the country's top position, succeeding Brezhnev, who had died a few days before.

The "golden age" of Soviet parapsychology, the first stage of its contemporary development, lasted through most of the 1960s. It began with Professor Vasiliev's spirited advocacy of the research he had long proposed; it became obscured after Andropov took control of the KGB, which intruded more firmly into scientific activities, including the monitoring, supervision, and actual conducting of experiments.

From mid-1968 on, and quite noticeably by 1970, contact between Soviet parapsychologists and their colleagues abroad began to dry up. By 1975, the Laboratory for Bio-Communication was disbanded. Publication of findings by such authorities as Professor Kogan ceased, while rumors concerning KGB-operated laboratories circulated. This was a period of transition, with new plans made, blueprints prepared, staff tentatively selected, some projects at least publicly abandoned, and others pursued in an exploratory, probing, and even confused manner.

128 While the [outlined ESP] project may never have been undertaken, it seems certain that the Central Intelligence Agency did engage in psychic experiments. One source of information on this subject is ex-CIA employee Victor Marchetti, who wrote several books based on his fourteen years with the agency. Marchetti, who tends to be critical of the CIA's activities, has said that it once sought to establish mediumistic communication with spirits of agents who had died. He recalled that the agency's "scientific spooks" were "progressing into parapsychology, experimenting with mediums in efforts to contact dead agents, with psychics in attempts to divine the intentions of the Kremlin leadership and with even stranger phenomena." Marchetti asserted that the CIA had tried to make contact, through a medium, with Oleg Penkovsky, a colonel in the Soviet Army who had been one of its most valuable contacts during his lifetime. On May 11, 1963, Penkovsky appeared before the Soviet Supreme Court in Moscow, where he was declared guilty of treason and sentenced to be shot to death. As a colonel in the military intelligence branch of the Soviet Army, he had been assigned to artillery in a "civilian capacity." Penkovsky was a member of the Soviet State Committee for the Coordination of Scientific Research Activities, with responsibilities in domestic and international technological liaison and development.

153 The history of parapsychology is a history of revelations that at times have attracted the participation of scientists of world renown, such as D. I. Mendeleev, American physicist Robert Wood, etc. This naturally evoked and evokes the distrust and annoyance of specialists because investigation reveals too many cases of simple mystification and cheating during parapsychological experiments. The second reason for distrust is the inability to reproduce paranormal occurrences; that is, they do not meet the requirements of credibility as scientific facts.

[The following article (extracts) conveys the critical perspective held by orthodox Marxist-Leninists in East Germany on explorations of psi in other East European countries.]

[Continuing Ebon's *Psychic Warfare: Threat or Illusion*]

170 *East Berlin: Modern Superstition, Disguised As Science* by **Wolfgang Spickermann**

While other Eastern European countries have shown a lively interest in parapsychology (psychotronics), East Germany - the German Democratic Republic - has displayed official coldness toward the subject. International conferences in the field are attended by representatives from Czechoslovakia, Romania, and Poland, but never by residents of East Germany. Even at a time when Soviet researchers either attended such meetings in person or submitted papers that

were read or circulated in their absence, no East Germans were present. In this respect, the East German position has been closer to that of Communist China, at least during Mao Zedong's lifetime, than to that of the Soviet Union, where serious study of parapsychology has been publicly advocated.

Mr. Spickermann's article, published in Neues Deutschland, the official daily paper of the East German Communist Party (the SED, or Sozialistische Einheits-Partei Deutschlands), appeared under the heading of "Ideological Questions" on February 8-9, 1975. It was subtitled "Parapsychology - Latest Fad of the Irrational." The article appeared at a time when demonstrations by Israeli psychic-conjurer Uri Geller attracted considerable attention in the United States and Europe; Geller appeared able to bend forks and keys by willpower, and performed other apparently psychokinetic, telepathic, and clairvoyant feats.

172 Sensational reports, which emanate from researchers equipped with academic degrees and which are widely publicized in the bourgeois mass media, are gaining a widening circle of consumers. Some 25 percent of the readers of the British scientific periodical New Scientist, for example, are convinced that there exists something like extrasensory perception. Another 42 percent regard it as not entirely impossible. These results emerged from a survey made in 1972. A survey made in 1973 showed that 2 percent of adult men and women in the FRG [West Germany] firmly believe in witches, while 12 percent could not make up their minds. And in medicine, too, occultism and superstition have gained fertile ground. Thus, the number of licensed (non-medical) health practitioners in Munich gained 20 percent during a three-year period."

The most recent wave of spiritism, more or less disguised as scientific, passed some forty years ago over a populace buffeted by economic crises and fears. Worldwide economic depression and rampant unemployment created a fertile ground during the 1920s and 1930s, when prophets of black magic, clairvoyants, card-readers, and magic-dispensing prayers-for-health were everywhere. One has only to remember the "clairvoyant" Erik Hanussen, whom the fascists used as an instrument of their propaganda [Hanussen prophesied Hitler's rise to power, but was murdered by Nazi leaders who regarded him as dangerously ambitious. - Ed.] Another team were the brothers Willy and Rudi Schneider, originally from Hitler's birthplace, Braunau-on-Inn [Austria], who during the 1920s ranked as stars in occult clubs in Munich, Paris, and London. Or the Bavarian peasant girl Therese of Konnersreuth, whose alleged ability to rival unearthly forces (she displayed Jesus-stigmata on her hands and feet) attracted thousands of pilgrims.

Once again, today, the crisis in the capitalist countries encourages the revival of irrational trends within bourgeois ideology. At a time when the crisis within bourgeois philosophy manifests itself, among other things, in a form of skeptical pragmatism, while political economics cause pessimistic headlines, and while conservatism has once again become acceptable in public life, respectable academicians are able to achieve television and publicity success through mystical pseudo-science.

173 Dramatic developments in the natural sciences during this century, the emergence in physics of quantum and relativity theories, or the successes in genetics, for example, are in the main trends that can only be correctly interpreted when one employs dialectical materialism. Without such a means of evaluation, the natural scientist stands defenseless in the face of the vagaries of bourgeois ideology, including superstition disguised as science. "In order not to face such an event



helplessly," V. I. Lenin wrote in his work *On the Meaning of a Challenging Materialism* [On the Significance of Militant Materialism], "we have to comprehend that, without a sophisticated philosophical basis, no natural science, no materialism can succeed in the struggle against the onslaught of bourgeois ideas and the reconstitution of a bourgeois ideology." In order to survive this struggle and to continue it to a victorious end, the natural scientist has to be a modern materialist, a conscious adherent to the materialism represented by Marx, which means he has to be a dialectical materialist.

Today, parapsychologists at times utilize the most modern experimental equipment in order to find experimental proof for their mystical working hypotheses. But their success is often the same as it was two hundred or one hundred years ago. Because, at times, these researchers suffer the same fate as William Crookes, who discovered the element thallium, and of whom Friedrich Engels [for many years Marx's closest collaborator] wrote in his *Dialectic of Nature*: "Mr. Crookes began about 1871 to study spiritistic manifestations, and utilized a variety of physical and mechanical apparatus, spring-scales, electric batteries, etc. Whether he brought along that essential device, a skeptical-critical head, or whether it lasted to the end in good working condition, will have to be decided later on."

In any event, Mr. Crookes was soon as quickly trapped as Mr. Wallace, another explorer of nature, who had turned toward spiritism. [Alfred Russel Wallace developed a theory of human evolution separately, but at the same time as, Charles Darwin; he was a convinced spiritist. - Ed]

Engels notes in the same work: "In fact, pure empiricism is unable to handle the spiritists. First, the 'higher phenomena' are only revealed when the particular 'researcher' has already been trapped to a point where he only sees what he is supposed to see, or wants to see... Second, the spiritists do not care whether hundreds of alleged facts are revealed to be trickery, or dozens of alleged mediums turn out to be simple tricksters. As long as not every one of the supposed miracles has been explained away, they control sufficient territory."

Falsification has for quite some time managed to invade "scientifically" operated parapsychology. Quite recently, such a scandal affected the Institute for Parapsychology at Durham (USA). There, experiments with rats were supposed to prove that even animals are able to precognize events and to influence them.

174 When we communists say that, with the socialist world system, a new era has begun, we express a preference for our system: this means the manipulators of darkness, misleading superstitions, and the profiteers of human ignorance are once and for all deprived of a nourishing soil.

Serious natural scientists and Marxist philosophers among us are engaged in unmasking such modern merchants of darkness. Among the passionate defenders of scientific honor stands Professor Dr. Otto Prokop and his collaborators of the Institute of Legal Medicine at Humboldt University in [East] Berlin. There, such occult undertakings as "thought photography" and "life emanations" are being unmasked as conscious frauds.

We Marxists-Leninists, in principle, consider the world as knowable and changeable by the efforts of man, who to us ranks as the highest of all things.

[End Ebon]

### **Ingo Swann on Russian parapsychology**

JK: Surprisingly, Ingo Swann, the “father of remote viewing,” followed Soviet parapsychology experiments. Swann was politically conservative, a Republican, very anti-Communist, and even edited a book, *What Will Happen to You When the Soviets Take Over* (1980). But he recognized that the Soviets had gone against their materialist framework and had done extensive work on psi [See Swann, *Superpowers of the Human Biomind*, <https://ingoswann.com/empiricist>]

p 378

Chapter Two [On Kazhinsky, Vasiliev, Bekhterev]

...Russia had a long history of hypnosis studies in medicine, education, and psychiatry. Soviet literature reflected on-going and contemporary scientific interest in the stimulation of telepathy, clairvoyance, and psychokinesis, either by drugs or electronic means.

In the past, Russian researchers had experimented with telepathy-at-a-distance, a technique of intriguing potential.

#### **THE EARLY ORIGINS**

It was quite likely that the early origins of the Soviet research machine may have begun with the work of Bernard Bernardovich Kazhinsky, a student in Tiflis (now Tbilisi), in the state of Georgia boarding on the Black Sea. His interests apparently were triggered by a telepathic experience of his own.

In February, 1922, Kazhinsky was invited to address the All-Russian Congress of the Association of Naturalists, a top scientific organization perhaps equivalent to the American Institutes of Mental health today.

The topic of his lecture was HUMAN THOUGHT-ELECTRICITY, and he quickly published a book under the same title. Having been invited to address the All-Russian Congress, it would be clear that the Congress supported and funded Kazhinsky's work, while his research thereafter apparently became classified.

By 1923, he had published his early findings in a book entitled THOUGHT TRANSFERENCE. This book attracted favorable attention among important brain researchers at the time. <http://www.biomindsuperpowers.com/Pages/Ebon1.html>

More visible and easier to document was the work of Professor Leonid L. Vasiliev, later to become Chief of the Department of Physiology at the University of Leningrad.

Born in 1891, Vasiliev had been a student of Leningrad physiologist Vladimir M. Bekhterev who had established the Leningrad Brain Research Institute. His granddaughter, Natalia P. Bekhtereva, had joined the Institute in 1921, and ultimately became its director.

Vasiliev became a member of the Committee for the Study of Mental Suggestion the following year. "Mental suggestion," or hypnosis, became central to his interest. In 1928, he visited Paris, as well as other Western European cities. Vasiliev spoke and wrote French fluently, and the Paris Institut Metapsychique International (IMI) remained his major contact with Western psychical research throughout his life.

Vasiliev established an ideological basis for the Soviet research in several books, lectures, and articles. His basic thesis was the experimental facts of telepathy, for example, should be examined from a physiological (or material) viewpoint, so that they could not be exploited by advocates of "religious superstition" (or an idealistic viewpoint). He was criticized as providing a pseudo-scientific framework for a return to idealism under the mantle of Marxist dialectical materialism.

His major and influential book **BIOLOGICAL RADIO COMMUNICATION** was published in Kiev by the Ukrainian Academy of Science in 1962.

Kazhinsky concluded that "experimental confirmation of the fact that communication between two people, separated by long distances, can be carried out through water, over air and across metal barrier by means of cerebral radiation in the course of thinking, and without conventional communication facilities."

He added: "One important feature of the above-mentioned experiment is worthy of attention. The electromagnetic waves accompanying the thought-formation process (visual perceptions) in the inductor's brain reached the cells of the indicatee's cortex after having traveled a long distance, not only in the air and through water but also through the hull of a submarine.

"This would justify the following conclusions: 1) these electromagnetic waves were propagated spheroidally, not in a narrow directed beam; 2) these waves penetrated though the submarine hull, which did not block them, that is, it did not act as a 'Faraday cage'."

Kazhinsky noted that a radio receiver in the marine laboratory of the Soviet scientific research vessel **VITYAZ** had been unsuccessful in intercepting electric waves emitted in the water by the torpedo fish. He added that: "the radio receivers in the submarine did not intercept these waves. This prompts the conclusion that some electromagnetic waves of a biological origin possess yet another, still unknown, characteristic which distinguishes them from conventional radio waves. It is possible that our ignorance of that particular characteristic impedes further development of research work in that field."

Vasiliev noted in another book **EXPERIMENTS IN DISTANT INFLUENCE** (which first appeared in Moscow in 1962) that while official denials of the shore-to-submarine experiment suggested "a certain caution," nevertheless "This experiment showed -- and herein resides its principal value -- that telepathic information can be transmitted without loss through a thickness of water, and through the sealed metal covering of a submarine -- that is, through substances which greatly interfere with radio communication...Such materials completely absorb short waves and partly absorb medium waves, the latter being considerably attenuated, whereas the factor (still unknown to us) which transmits suggestion penetrates them without difficulties."

49 As Russia and surrounding countries became Sovietized, everything in them fell directly under State Communist control -- including scientific research projects, plans and agendas. In an increasing direct sense, everything had to be approved from the top downward -- and Kazhinski's controversial research could not have been an exception.

As was well-understood, theoretical Communism was anchored in philosophical and scientific materialism. Within those contexts, anything was abhorred which might have metaphysical or superstitious implications.

[End Swann]

## **Additional sources**

[For links to these sources see the Bibliography]

**Hill, Scott**, *Renaissance of Parapsychology* (1976) at a conference in Kazakh Soviet Republic.

**Ivanova, Veneta T.**, *Occult Communism: Culture, Science and Spirituality in Late Socialist Bulgaria* (Dissertation 2017); *Chapter 4: Dunov, Peter, White Brotherhood: Occultism and Communism In Twentieth-Century Bulgaria*

**Ivanova, Veneta T.**, *Chapter 2: Occult Communism in Praxis: Aesthetics, Spirituality and Utopia. Chapter 3: From Occultism to Science: Suggestology and Parapsychology Under Communism.*

**Khokhlov, Nikolai**, *The Relationship of Parapsychology to Communism*. Paper presented to the Foundation for Research on the Nature of Man on September 1, 1966.

**Magdo, Zsuzsanna**, *The Socialist Sacred: Atheism, Religion and Culture in Communist Romania, 1948-1989* (Ph.D. Dissertation, University of Illinois at Urban-Champaign).

JK: Socialist atheists' attempts to develop a "positive atheism," a set of beliefs and practices imbued with spirituality.

**May, Edwin; Rubel, Victor; McMoneagle, Joseph, and Auerbach, Loyd**, *ESP Wars East and West* (2018)

p 203 in pdf

[Major General Nikolai Alex Sham:] "I witnessed many experiments that convinced me of the existence of physical fields and principles that modern science has not studied, but which are quite real and suitable for practical use. These fields and principles are connected both to the physical world and to the psyche, and they can work cooperatively with both."

221 [Ratnikov:] "We prepared a very skilled psychic to connect with the information field."

227 Ratnikov discusses how difficult it is to separate the symbolic from the literal information.

237 [General Savin:] "I've come to the conclusion that from the standpoint of the laws of physics, this phenomenon still remains unexplained. It looks to me that the physicist Tesla is the only one

who came close to understanding this, but I never did find a definitive answer to this question in those of his writings that I studied."

**Rosenthal, Bernice Glatzer**, *The Occult in Soviet and Russian Culture*, Cornell (1997)

**Schaefer, Georg**, *In Defiance of the Ideologists: Parapsychology in the Soviet Union*. *Journal of Parapsychology*, Durham, N.C. Vol. 30, Issue 1, (Mar 1, 1966): 48.

**Vasiliev, Leonid**, *Research on Telepathy in the Soviet Union* (1962). *New Scientist*, March 22; *Experiments in Mental Suggestion* (1963); *Mysterious, Phenomena of the Human Psyche*, 2nd ed. Moscow, 1963; *Experiments in Distant Influence* (1976)

**Zhivkova, Lyudmila**, *Occult Communism in Theory: Weltanschauung from Private Creed to State Policy*

**Znamenski, Andrei**, *Red Shambhala, Magic, Prophecy and Geopolitics in the Heart of Asia* Theosophical Publishing House (2011)

**Znamenski, Andrei**, *Alexander Barchenko: Budding Red Merlin and His Ancient Science; Engineer of Human Souls: Bolshevik Cryptographer Gleb Bokii*

## Chapter 10 Remote Viewing's Challenge to Materialism

As acceptance grows, the implications of psi will become more apparent. But we already know that these phenomena present profound challenges to many aspects of science, philosophy, and religion...These challenges will nudge scientists to reconsider basic assumptions about space, time, mind, and matter. Philosophers will rekindle the perennial debates over the role of consciousness in the physical world. Theologians will reconsider the concept of divine intervention, as some phenomena previously considered to be miracles will probably become subject to scientific understanding.

These reconsiderations are long overdue. An exclusive focus on what might be called "the outer world" has led to a grievous split between the private world of human experience and the public world as described by science. In particular, science has provided little understanding of profoundly important human concepts like hope and meaning. The split between the objective and the subjective has in the past been dismissed as a nonproblem, or as a problem belonging to religion and not to science.

Dean Radin, *The Conscious Universe*

As follows from prominent researcher Dean Radin's points, remote viewing poses a serious challenge to materialism. As we have seen in Part Two of this Sourcebook, remote viewing allows a person to access information from the past or the future and from a location that is not ordinarily accessible. This ability is not consistent with current scientific explanations of the world, which are almost entirely based on forms of reductionist materialism. That is, reducing consciousness to the point where it disappears and "physical matter" is all there is.

Physicist and astronomer Sir James Jeans wrote:

The universe looks more and more like a great thought rather than a great machine.

- *The Mysterious Universe* (1930)

And Marty Rosenblatt, founder of the Applied Precognition Project, says "Consciousness is the fundamental."

The issue can also be posed as the relationship between body and mind. As we have seen, some philosophers hold that these are two separate entities. Others, that there is a unity between them; others, that these are just "language games" which we must learn the limits of. And still others call it all metaphysics, nonsense.

In this chapter, I will present the remote viewing and other psychic experiences of three prominent remote viewers: Ingo Swann, Darryl (Daz) Smith and Debra Lynne Katz.

Let's start with what Ingo Swann, the "father of remote viewing," wrote about the history of these philosophical debates. In a presentation at the United Nations, Ingo focused on the previously unknown perceptual capabilities of what he called the human biomind. In addition, Ingo had had

a lifetime of experiences that belie a materialist or reductionist interpretation -- from an out of body experience as a child, to seeing astral bodies, and to channeling information that led him to write the *Mongolian Prophecies* (which Swann says were channeled.) There is no doubt that Swann's personal experiences convinced him that there is far more to existence than the alleged meaningless motions of atoms in the void.

After that, for a present-day perspective I asked two of the most accomplished members of the remote viewing community to share their views. They did so in the form of answers to questions supplemented with excerpts from their books.

Both Daz Smith and Debra Katz have had many remarkable experiences which speak to the consciousness/Idealist/spiritual side of the debate. Their experiences, shared by many other remote viewers, and in fact found in every country over the centuries, provide substantial personal evidence that reductionism, the attempt to eliminate or ignore consciousness and paranormal experiences, simply fails to convince. A narrow materialism just cannot get the job done. Can a broader materialism do so? I address that prospect in Chapter 11.

**Ingo Swann**, *New Scientific Discoveries Regarding the Existence of Certain Psi Faculties*. Synopsis of a paper presented on 21 March 1994 at the United Nations to members of the Society for Enlightenment and Transformation [Paraphrasing has been modified.]

They [early psychical researchers] indicated that if psi faculties were purely psychological in origin and nature, then no bio-physical receptors would ever be found. However, by the same turn-around of the scientific argument against the real existence of psi, should physical receptors for accessing so-called psychic "information" be discovered, then science proper would be obliged to accept that its one demand was fulfilled.

What has just been presented has long been characterized as the "conflict" between science and parapsychology. This conflict has often been distorted to include other factors. But the basic factor clearly and unambiguously hinged on the absence of bio-physical receptors which would account for the subtle kinds of information so-called "psychics" deal with.

In parapsychological parlance, this kind of information came to be called "extra-sensory" or "non-sensory." These two terms unambiguously demonstrate that psychical researchers and parapsychologists themselves did not consider that bio-physical receptors for psychic information would ever be discovered. And it is from this context that the basic definition of "psychic" is derived: i.e., lying outside of matter, physicality, the physical sciences or knowledge of the physical universe.

There is now a very interesting aspect to this conflict which should be pointed out because it has great bearing on later developments. If the conflict is dissected carefully, it reveals that scientists, psychical researchers, or parapsychologists expected that any bio-physical basis for psi faculties would be discovered.

Indeed, early psychical researchers looked for supernatural explanations outside of any materialistic basis. By their own name, paraPSYCHOLOGISTS clearly opted for a psychological

explanation, not a bio-physical one. And there is no evidence at all in the parapsychological literature that parapsychologists invested any time either theorizing or researching for a bio-physical explanation. This is to say, that any possible bio-physical explanation was, and is, just as alien to parapsychology as it was to the material sciences proper.

Here matters rested -- until the first electron-microscope was developed in Germany in 1932, and later evolved in the United States and Canada. After World War II, cellular biology underwent a great jump in importance because of the electron-microscope and even more penetrating and precise later technical advances. Now began the slow process of comprehending that biological cells were not the simplistic things once thought. Rather, they were composed of ultra-minute factors which functioned in very remarkable ways.

Also, during the 1930s another development occurred which was to have enormous importance and impact, an impact which is yet in progress today. The fact that biological organisms have some kind of electromagnetic substrate was discovered about 300 years ago. But this substrate was considered weak and unimportant in the face of the chemical substrate which was thought to be very strong.

During the 1930s, however, researchers in various parts of the world, and especially in the former Soviet Union, began to realize that although the electromagnetic substrate was "weak" it nonetheless played very important roles within the bio-chemical whole of ALL biological organisms. Advances in bio-electromagnetism were somewhat delayed, however, until appropriate technology could be invented to deal more adequately with subtle bio-energy forms. The technology began to be available during the 1960s, and by the late 1970s the extraordinary importance of the bio-electromagnetic substrate could begin to be seen.

...The bottom line of all these developments is that during the last forty years a very large series of new research disciplines have come into existence. These new disciplines constitute an intermixing of science, technology, microscopy, subtle chemical exchanging, and electromagnetic and bio-electromagnetic expertise.

...At this point, I believe I've now presented for your consideration the rudiments of the Particular Situation I referred to at the beginning.

The Particular Situation consists of three factors:

- (1) science demanded that a bio-organic explanation for psi faculties be found before it could accept them as real;
- (2) bio-organic explanations have been found for many kinds of psi faculties; and
- (3) everyone seems to be ignoring both the facts and the implications of (2) as just stated  
[End Swann]

Let's continue with **Daz Smith**.



I have not had the exceptional experiences Daz Smith and Debra Katz have, but I know both well and their integrity is unquestioned. I don't doubt that they have had these experiences. Both are highly respected throughout the remote viewing community and no one questions their veracity.

**Daz Smith** is one of the leading people in the remote viewing community. He has a long record of accomplishments in the field.

- Daz is one of the very few who makes his living entirely from remote viewing. His income comes primarily from his personal RV business and as a viewer in the Future Forecasting Group.
- has published several books on remote viewing (see below and the Bibliography)
- since 2009 he has published *Eight Martinis*, the only magazine devoted to remote viewing.
- maintains the web site with the largest amount of historical and current information about remote viewing.
- has developed his own form of RV which he calls Flow; he has provided intensive training to 23 students thus far (spring of 2024).
- worked over 250 missing person cases for U.S. police forces as a member of the Findme Group.
- took part in a Remote Viewing project with Debra Katz which won the Warcollier prize.
- produces a Remote Viewing Podcast and is host of the Dazchat (periodic online discussion).
- has appeared in 575 videos as a viewer and interviewer.
- pioneered live whiteboard demonstrations of remote viewing.

Finally, on top of all that, Daz is a professional photographer and an expert on UFOs.

Web site: <https://www.remoteviewed.com/about-daz-smith/#>

Books: <https://www.remoteviewed.com/daz-smith-remote-viewing-books/>

Eight Martinis magazine: <http://www.eightmartinis.com/>

Podcast: <https://www.remoteviewed.com/remote-viewing-podcast/>

YouTube videos (575 of them): <https://www.youtube.com/hashtag/dazsmith>

YouTube channel: <https://www.youtube.com/@ParanormalViewing>

Future Forecasting Group: <https://www.futureforecasters.com/>

Photography: <http://www.dazsmithphotography.com/>

Ask Me Anything on reddit

[https://www.reddit.com/r/remoteviewing/comments/7rrm56/i\\_am\\_daz\\_smith\\_ama/](https://www.reddit.com/r/remoteviewing/comments/7rrm56/i_am_daz_smith_ama/)

Let's look at Daz's beliefs and insights regarding the material and spiritual worlds, first as expressed in his books and then in answers to the questions I provided.

**Daz Smith**, *Surfing the Psychic Internet* (2006)

page 158 in the pdf

Protection and grounding

I come from a background of classical psychic training, therefore as taught in this time old way, I like to protect myself with a shell of white energy.

159 [Explains how he creates the protective bubble]

The universe is a vast complex beast and as with all things there are good and bad life forms. For this reason you need a protective field around you to discourage the bad. This field is created by you from your internal energy and expanded around yourself. This field I envision as a ball of intense white light that forms outwards from my heart Chakra.

[Daz then discusses techniques for meditation, breathing, position, etc.]

47 With a sword, Daz slays two predatory creatures that broke the protected circle and appeared in his meditation group.

128 [About three attacking “caretakers”]

So if you travel and I hope you do, then keep a healthy mind and a watchful fear and respect for beings like this. Know that they too have a place in the scheme of the universe, and just maybe it’s part of our destiny to help them find their place, as others help us find ours.

139 [The light being speaks]

“Man is the micro version of balance of the universe in play. Within each man there is a lifelong struggle with a multitude of problems and solutions all based around differing forms of balance. This has been reflected in your philosophy, stories, and your entire civilisation since man created his first thoughts. The entire planet is also a larger version of this cosmic struggle between the positive and negative forces of the universe, and at this current moment in time, on one level the balance has clearly shifted off centre in the negative direction, and the living earth battles with you, its inhabitants to try and shift this balance back. There are too many of you, doing too much, with no counter balancing actions, so a balance marker has shifted and this brings a time of turmoil. Part of man has glimpsed the beauty and truth of spiritual attainment and man’s true place within this. At the same time the eternal struggle of shifting balance calls for a reaction to keep the balance. So as people attain what you call the higher spiritual levels a universal balance is also kept with an equal number of human atrocities and negative actions as the balance swings between positive and negative.”

140 “Now that we are here let’s discuss waves. The universe and you yourself is completely made up of waves. The expanding rhythmic patterns of waves and how they interact with all other waves creates reality, time and space. Of course within this space is YOU. You are made of waves. Man has always had an affinity with waves but the true meaning of this until now has escaped you. How many times has man looked at the sea in wonder or gazed longingly at the movement of the skies. This is a distant memory of the knowledge that was lost. Waves. This is both the answer and the question.”

143 “There are three lessons we want you to take away and share, these are: Whatever, however, and whoever, ultimately everything in the universe moves in a movement towards balance. Sometimes a shift in either direction occurs, but balance will always be sought.

“Secondly, look towards the natural motion of the universe. Waves can set you free, they are the answer to many of man’s dreams, desires and needs.

“Thirdly, you are not alone, you ALL have the power to be anything, anywhere and at any time in the universe. As with everything YOU are the essence.”

146 Now that I can look back on the experience with a clear, objective mind I realise it’s not unlike an awakening. An awakening of the soul, a realisation that there are no boundaries to what man can do, with no boundaries to where we can go. Man has been asking the questions about the meaning of life, and looking for life in the farthest reaches of the galaxy, but at the same time he has ignored the yearning, niggling feeling that resides within us all. This universal knowing that there is more! And there is, it’s been there all along waiting for us – we just need to stop, to take a deep breath, to shut out the noisy complicated world we have created. It’s only then when we can truly reflect inwards that we can move outwards and grow into the beings we are destined to be.

I know now that the universe is filled with beautiful and varied life. That other worlds and dimensions exist in the smallest of places and that we as human beings are special and that we have access to them all. I also now know that as in everything there are misguided dark souls who seem to upset the universal balance out of a selfish greed for themselves. As you have read I have personally battled some of them and still on occasion catch myself thinking back to their chilling message that we will meet again, and we probably will. A part of me excitedly waits for this time, for armed with the knowledge that we are both creators of our own destiny and the universes around us.

### **Daz’s responses to questions about consciousness, materialism, idealism and what the universe is all about.**

Questions:

1. Do you believe that “Consciousness is the fundamental”? That is, that matter, the material world arises from Consciousness? Or from a Great Spirit, Supreme Being, or God?

Response: I do not know. The deeper down the rabbit hole I go – the darker it all appears to me in my understanding. There does seem to be layers or levels of existence that we are a very small part of that seem to be universal, constant and everywhere. Now, is this a divine being? I can’t answer but there is a level of intelligence and control at a level higher than myself.

2. How do you respond to the idea that the sun and moon have been around a lot longer than humans and that therefore human consciousness cannot be fundamental to the universe?

I'm not entirely sure to the connection between the length of the sun and moon's existence and the existence of human consciousness. But if it's about length of time – it's my experience that consciousness in this current human form – has been other previous energies and consciousnesses, not human.

3. Do you believe that “We create our own reality”? If so, in which of these senses?

- a. We literally create material reality with our minds. Without our minds, there is nothing there.
- b. We create our perceptions and thoughts. However, there is a reality that exists outside us, beyond us.

Response: WOW! Great question and the answer is yes to Both. We symbiotically create our own 'local' reality and this exists inside and beside many others including YOURS and a larger 'container' type reality of fundamentals.

JK: I noted this in Daz's *Surfing the Psychic Internet*, p 63 in pdf:

I saw that this is one of their biggest concerns for the future of mankind, not in technology, global warming, pollution, or war, but in man's realisation that we are Gods, and by being gods how we then affect the whole universe.

4. Experience of other beings, non-material beings. You encountered what you call “angels”, also neutral life forms which came into you, and the three dark figures which said they were caretakers shared the experience. Do you think these life forms are real for every person or only particular to you and your life?

Response: It's my experiences and also from research that they are universal and have been reported by many people through the ages. Probably slightly different in shape and form based on each individual's own reality.

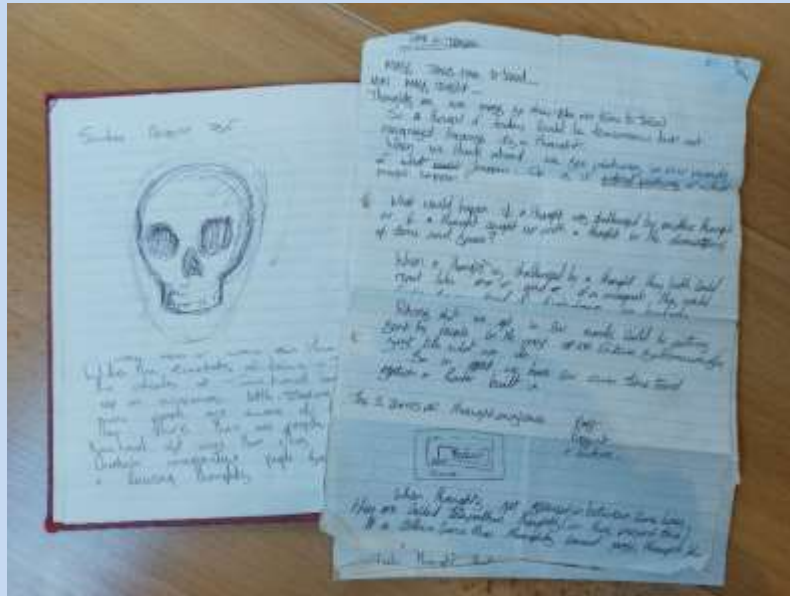
5. You experienced a variety of life forms as four of you meditated in a group. Do you think that remote viewers would benefit from viewing together in person as a group (“the classroom effect”)? Would doing so virtually as a group (e.g. in a virtual reality environment or simply in a Zoom meeting) have the same potential?

Response: OK, so what I experienced was NOT remote viewing. The classical techniques I used were what I would call 'aggressive' not in an angry sense but the intent and action was for travel and communication. Remote viewing is a 'passive' method whereby we are getting information with the intent to get information – not for direct, one-to-one travel and communication. The differences are subtle but clear. So having all the viewers in the same room or at the same time – no, not for remote viewing targets because its 'passive'. If RV were changed to be an 'aggressive' form of data collection – that may be different. But I would not use remote viewing for this, there are better tools.

6. What do you believe is your purpose during this life on the planet? Do you have what might be called an otherworldly or spiritual purpose”?

Response: When I was in my early classical training in my mid-teens (1986-87 onwards) I started writing a psychic journal. This comprises of experiences, thoughts and insights. My most earliest thoughts centered around the concepts and theories of using the mind to time travel. See attached image.

Now, all these years later its clear to me that because this all started for me from the age of ten, and where I am now after 27 years of Remote Viewing, that this was always my destiny. To what end or where I do not know.



And now let's hear from **Debra Katz**.

### **Debra Lynne Katz**

- Debra has a PhD in Psychology from the University of West Georgia.
- is the President of the International Remote Viewing Association.
- has published over 15 peer-reviewed articles in parapsychology.
- is the author of several books: *The Complete Clairvoyant; A Trilogy*, *Associative Remote Viewing: The Art & Science of Predicting Outcomes for Sports, Financials, Elections and the Lottery* (with coauthor Jon Knowles).
- is the founder and Director of the International School of Clairvoyance.
- is a member of the Parapsychology Association, associate member of the Rhine Research Center, the Society for Scientific Exploration and the Society for Psychological Research, along with the International Association for Near Death Studies.
- is a guest host on the [New Thinking Allowed Show](#), produced by Jeffrey Mishlove.
- is an accomplished clairvoyant, remote viewer, medium and energy healer who has worked for leading business manufacturers and stockbrokers.
- was host of the "Psychic Explorer" TV show.
- is a film school graduate and writer/director of short films and documentaries.
- has a Master's Degree in Social Psychology

Web site: <https://www.debrakatz.com/debrakatzbio>

Books: <https://www.debrakatz.com/books>

Research: <https://www.debrakatz.com/projects-2>

<https://debralynekatz.academia.edu/research#papers>

Videos: [https://www.youtube.com/results?search\\_query=debralyneKatz](https://www.youtube.com/results?search_query=debralyneKatz)

### **Debra Lynne Katz, *You Are Psychic* (2004)**

p 40 in pdf

It is not only unfortunate but downright tragic that so many people (spirits) live their whole lives having no knowledge that they are something other than a physical body and mind. These people can never fully know their true self or who they really are because they are not in touch with their true essence. People who have no concept of their own spirit often suffer from depression and feelings of hopelessness and frustration, and their lives as well as the process of their death are riddled with pain and fear.

48 If you gain nothing else from this book, I hope you will at least begin to consider the possibility that you are psychic, not just on rare occasions but all the time. Psychic abilities are spiritual abilities. As a spirit, you possess the same qualities often attributed to God. Spirits are creative; they are omniscient (all knowing) and omnipresent (everywhere at once). Your spirit has these abilities even when it is attached to a living body -- your body. Some of these psychic/ spiritual abilities can be classified as clairaudience, transmediumship, telepathy and clairsentience, all of which will be illustrated in this chapter.

Clairaudience is the ability to hear the thoughts of other spirits, both with and without bodies. Transmediumship is the ability of your spirit/energy to leave your body and to bring other spirits/energies into your body. Telepathy is the ability to send and receive thoughts through extrasensory means. Clairsentience is the ability to feel the emotions of others. When used consciously, these psychic abilities can assist you in understanding and healing yourself and others. When used unconsciously, as is so often the case, they may be the cause of much unnecessary confusion, pain, and suffering.

58 As discussed in the previous chapter, we are constantly picking up information about our universe and other people through extrasensory perception. We do this by transmitting and absorbing information (in the form of pictures, images, emotions, and pain) through our physical bodies and various energy systems that correspond to our physical anatomy. Two of these energy systems are the aura and the chakras.

Read any spiritual text from the Hindu, Buddhist, Sufi, and Cabalistic traditions and you will find universal agreement that human beings are much more than a physical body. Our physical body is really only a very small percentage of who and what we are. Our spirit is housed inside our body, but it flows far beyond the tenuous walls of our flesh. The part of our spirit that surrounds the outside of our body is an energetic field that is often referred to as an aura.

73 Clairvoyantly, I have seen that there are minute threads of energy, in the form of light, connecting everybody and everything together. Without these minute connections, we could not exist or communicate. The more intimate we are with a particular person, or the stronger our spiritual agreement, the larger or more dense these connections or cords of energy become.

Your energy has the ability to be immediately transported through space or time. When you have a thought, that thought is made of energy. Your thoughts are not just mental processes, but energetic ones. When you think of someone else, it is because that person's energy has entered or is remaining in your own energetic field, or because your energy has just traveled over to that person, or has been there for a while.

75 Your spirit is made up purely of energy, while your body is made up of energy and matter corresponding to physical laws. The energy of your spirit and body is the part of you that survives after you die and that is busy while you are sleeping. It is the part of you that is engaged when you are meditating or using your psychic abilities.

99 To some extent, our physical bodies are always grounded or connected to the earth (even when flying in an airplane, we are still connected to the earth's atmosphere by the gravitational pull,

therefore we can walk down the aisle of the plane without floating away). But what about our energetic or spiritual bodies? Some people are more grounded than others, and our grounding, our connection with the earth, can change drastically from minute to minute. Oftentimes, when a person is experiencing stress, nervousness, pain, or extreme emotions, their spiritual body becomes ungrounded. When a person is ungrounded, even though their physical body is still attached to the earth, the rest of their energy may be all over the place. It might be soaring above their head, searching for a kinder and gentler abode; or it might be racing through whatever unfortunate person happens to be in their path.

#### 240 Techniques for Handling Troublesome Entities

In your readings, you will undoubtedly encounter troublesome spirits at some point. These entities may be bothering your readee [the person for whom the reading is being done], or they may be pestering you as you attempt to read. Some of these spirits may have the highest intentions. They may wish to heal or help the readee, but are behaving in a way that is not conducive to the readee's wellbeing (as in the case of a loving but overbearing or controlling parent who erroneously thinks they know what is in the best interest of their child). Some spirits in this category are deceased relatives who don't realize they are dead or are not willing to let go of the readee (or vice versa). Many people erroneously assume that any spirit that has passed on is now enlightened, or at least wiser than they were before they were dead. From my readings I have discovered that some of these spirits do gain wisdom upon their passing, but many others do not. If your Uncle Fred was a jerk when he was alive, there is a strong possibility that he may still be one now that he has passed on. Even if he was a saint, if he is hanging on to you too tightly (or you to him), both of you could encounter a number of problems.

#### **Debra's response to questions:**

1. Do you believe that "Consciousness is the fundamental"? That is, that matter, the material world arises from Consciousness? Or from a Great Spirit, Supreme Being, or God?

Response: I believe that there exist material objects that exist independently of consciousness but that our perception, cognition, relationship to and experience of is uniquely shaped though many factors. These include: our physical make up (i.e. rods and cones in our eyes and the shape of our corneas); perceptual and cognitive lens we view these that are constructed by past experiences, shared societal metaphors and languages. Our unique personalities, dispositions, spirituality, also shape how we experience the outside world that looks very different to people of vastly different cultures, to animals, insects, or to those who look through telescopes, microscopes, MRI's and other technologies and machines.

In other words, there exists a separate material world that has a mix of consistent yet ever changing properties that appear very different depending on whose and what senses are perceiving them. Some are born from human creativity and ingenuity and some came from an undetermined source we might call God, if God is defined as the originator. I do believe everything started somewhere. Did it start with God, with aliens, with the thought of a powerful person? By something else we don't even have on our radar at the moment? Yes. Is God the same thing as the "big bang"? Maybe.



Other than knowing that God is an originator by a circular definition (in that this is what we call a creator), and observing that God seems to be an energy source that when someone plugs into through thought and intention (i.e. prayer, worship, gratitude), there seems to be a transformative effect on that person (whether or not the particular outcome they seek comes to fruition). So tuning into the source through intent is like plugging into an electrical outlet. Or maybe we are always already plugged in, but we sometimes forget to turn on the switch.

2. How do you respond to the idea that the sun and moon have been around a lot longer than humans and that therefore human consciousness cannot be fundamental to the universe?

Response: Human bodies are material. Human bodies did not create the sun and the moon and the stars. However, if human consciousness precedes and follows bodily death, they could have had a hand in the creation of these eons ago.

3. Do you believe that “We create our own reality”? If so, in which of these senses?

a. We literally create material reality with our minds. Without our minds, there is nothing there.

b. We create our perceptions and thoughts. However, there is a reality that exists outside us, beyond us.

Response: I believe we create our own reality through a combination of our actions, our minds (conscious thoughts, visualizations, intentions and subconscious) AND there is a reality that exists beyond us. For example: I have a choice. I can sit in my house and write or watch TV or I could decide to communicate with any number of people, such as my neighbors, friends, acquaintances or total strangers. Whether I decided to stay by myself or communicate today may have a substantial impact on my present experience and future reality in small and big ways. There are really hundreds, if not thousands, of people that I could potentially decide to communicate with in the next hour. Even reaching out to a single person could change the whole course of my life, either positively or negatively.

But what would lead me in one direction (reaching out) or another (staying by myself) is dependent on many internal and some external circumstances. If I’m feeling shy, or discouraged or tired or fearful, I’m going to either need to do some processes with my mind and body to change my energy and thoughts and actions, or to manifest (through the law of attraction with thought, intention, visualizations, affirmations, etc.) an external source to help push me to get my butt out of my chair, but it’s within me to do this. Of course some external source just on its own, independent from myself or intentions, could also just reach out to me (like a neighbor showing up, or a hurricane or flood could come forcing me out of the comfort and solitude of my house). But it is still up to me how I respond to these.

So I believe there is me and what I do, my own past creations that may impact things (for example my spouse might answer the phone or door before me, either helping to bring in a new person/opportunity or push away before I even have a chance to do anything but I did agree to have him in my life in the past so he is part of my own past creation that has an impact in the present) – but I do believe every once in a while something will happen just totally not related to my own consciousness, or my own creations, it just happens, but it still may be impacted by my past decisions that came from me.

For example, if there is an unexpected storm, the way it impacts me is related to what preparatory steps I took in the past and how I choose to handle it now. So even a natural disaster is impacted by the choices I've made, am making, will continue to make and in that respect even a natural disaster is not existing purely on its own or independent to me at the time it impacts me. Now one occurring in the middle of the ocean is more independent of people but not entirely since it could be impacted by global warming and other human influences.

4. Experience of other beings, non-material beings.

b. Debra, you've mentioned encountering other beings. What sorts of beings were they and what was your experience of or with them?

Response: I have encountered so many beings in doing intuitive work (clairvoyant readings, remote viewing sessions and mediumship); I will try to briefly classify them here. Some of these matched descriptions given by others, allowing me to give them a name (like an alien, or an angle), some were totally new. However, it's normal when you encounter something to try to look in your memory banks for whatever it most closely applies to. So a short, stout little man that has feelings kind of devious or mischievous sounds like what people call dwarfs, a being that looks like Tinker Bell will be labeled a fairy, a little green man with large, black eyes will be referred to as an alien, but this doesn't guarantee this is exactly what they are.

Keep in mind I've now done about 5000 worth of hours of readings for thousands of people in the past 27 years. I didn't start out having any desire to see spirits or entities or to contact them. They however were present, sometimes interacting and engaging and having a real effect on myself and my clients, and therefore I had no choice but to notice them. Also I'll say that on dozens of occasions I've received independent confirmation that the way in which I was perceiving an entity, in terms of their appearance, behavior, communications, was very much on par with how a client was as well – with both of us having no foreknowledge of how the other had experienced the spirit.

- Angels (small and large).
- Aliens – Standard Grays of various sizes, a kind with an enormous, bulbous head that likes to attach to people's addictions, ancient ones that smell and feel like mushrooms, one that looked like a human but his eyes were like fisheyes, too far on either side of his head. There have been others.
- Beings that pretend to be someone I know but the eyes are off and then when I realize it's not who they are pretending to be they disappear or turn dark.
- Demonic spirits.
- Spirits that are parasitic in the form of snakes, spiders, roaches, other bugs. These also sometimes have eggs.
- Telepathic Interfering Spirits – ones that communicate very loudly.
- Council beings, ones that are part of an overseeing/ruling group that seem to suggest I shouldn't have access or entry to wherever I came upon them.
- Spirits thinking they are God (ones that are insane).
- Addition Spirits – feed off of addictions.
- Suicide Spirits – encourage people to kill themselves.
- Deceased people in various states of material form to no material form.

- Channeling Spirits.
- Gnome/draft like, fairy like.
- Little Blue People.
- Huge angry parasitic that cause people to get very angry.
- Walk In – spirits who take over bodies.
- Stuck Spirits.
- Sexual Predators.
- Spirit Guides (ones frustrated asking for help), ones showing appreciation, ones helping with Reading and mediumship guides.
- Healing guides (of many cultures, appearances, etc.).
- Animal spirits (birds, owls, dolphins, octopuses).
- Gods (Jesus, Mary, Ganesh, Lakshmi, Quan Yin, monkey spirits).
- Ones not sure if they are humans or spirits.
- Lots of body parts (mostly hands and glowing eyes).

6. What do you believe is your purpose during this life on the planet? Do you have what might be called an otherworldly or spiritual purpose”?

Response: Yes I believe I have an obligation to help, to make contributions to humanity, and to make this world the best world I can make for as many people as possible. It doesn't matter who they are. I don't need to know them and they don't need to give back. I have an obligation to be of service. Why I don't know.

Even when I was just about 13 years old, reading books from the theosophical society that talked about Jesus – even though I was Jewish and well aware I'm not supposed to even believe in Jesus, I knew that Jesus was a role model that I needed to emulate. I took an oath at that age to be like him. I've not ever told anyone about that oath, it was between myself and God. I didn't even know for sure if Jesus existed (I would go to find that out later when he showed up while I was doing healings). I just knew I had an obligation to try to do my best to be like him - and when I fail (such as when I get angry at someone and tell them off) - to try to do better the next time.

JK: It is clear from Debra and Daz's experiences that they believe -- they know -- there is a great deal more to reality than what an atheist like Bertrand Russell believed (for example in *Why I am Not a Christian*).

They both believe that an independent reality exists AND that we humans create our own local reality based on our physical makeup, personal experiences, and choices.

They both have experienced entities far beyond anything we encounter in our daily life among people, animals, and the natural world. Debra says she experienced a long list of such beings from angels to aliens to “stuck beings”.

They believe there is some unifying force or God that underlies the universe, that there is purpose, service, a calling in their lives.

Their experiences and beliefs obviously come down forcefully on the anti-reductionist side. They and Ingo Swann are in accord that there is an awful lot more going on than our current reductionist physics supposes.

I am very grateful to Daz and Debra for being willing to share their extraordinary personal experiences and their deepest beliefs in this book.

Despite the great weight of this evidence, I have not given up the ghost (so to speak) on a materialist explanation of these phenomena. If there is one, it must be, for sure, a 'proper' dialectical one! I revisit this subject in the next and concluding chapter of the Sourcebook.

## Chapter 11 Wrapping Up and Looking into Pandora's Box

As I noted in the Introduction, one reason I assembled this Sourcebook was to review Marxist philosophical and political writings, particularly around dialectics. Dialectics played a major role in making the two greatest revolutions of the 20th century, the Russian and the Chinese and I wondered what its applicability could be today.

Another reason was that I hadn't thought much about these issues since the mid-1990's when I withdrew from the party-building movement and I wanted to clarify my views on fundamental philosophical issues, including dialectics. Being involved in remote viewing for 20 years was also a factor, because RV calls materialism into question, as we've just seen in Chapter 10. I've felt like a materialist all these years even though just about everyone around me in the field has rejected materialism. I wanted to see if some form of materialism holds up.

Finally, because I'm getting way up there in years and it's time to sum up, if I'm ever going to.

While I'm no longer active on the Left, I've followed electoral politics in recent years because of the severe threat posed by the the authoritarians, MAGA -- far more dangerous than the old Republican Party. After Trump's second acquittal by the House, I felt I had to do something again, so I started a Facebook group (now called 2024+).

<https://www.facebook.com/groups/187507739158366>

The purpose is to provide information about the many progressive groups doing electoral work to defend the republic (our partial democracy) against the onslaught of the right wing crazies. I started the FB group because when I wanted to volunteer in 2020, I was unable to find a guide to these groups.

In practice, progressive electoral work in this period has meant by and large supporting Democratic Party candidates -- because that is the only party that is in a position to retain our democratic electoral framework (however flawed). We simply can't afford to let a racist, anti-woman, anti-worker, anti-facts movement take control of the country -- again. 2016 to 2020 gave us a bitter taste of what a repeat of the Trump presidency would mean. If we fail in 2024, there will be an onslaught of neo-fascist policies and we will lose much of the space we have for progressive organizing.

The Russian and Chinese revolutions took place many decades ago and in countries that were not advanced capitalist societies. Conditions were quite different from those in the United States in 2024. However, Marxism is not supposed to be culture-bound nor limited to "Third World" countries. The approach and methods are intended to be flexible and dynamic, applicable in many situations.

I have not closely followed the small Marxist-Leninist left that still exists, nor social democratic groups like DSA, nor the new progressive groups that have emerged in recent years. However, I have familiarity with some of these groups.

My feeling is that there are (must be) principles and lessons from the revolutionary experiences in the 20<sup>th</sup> Century that apply to making fundamental social, economic, political and (I'll include) spiritual change in the 21<sup>st</sup> century. That may not be the case, but if it is, perhaps presenting some of the fundamental of dialectics and of dialectical materialism may be useful to people who are curious about Marxism, about dialectics, and/or about what went wrong (and what went right!) in the many revolutionary movements of the 20<sup>th</sup> Century.

Also curious and anxious about how we can emerge from the proliferating catastrophes that we face -- billions of people whose very lives are being destroyed by wars or are seriously at risk, the disgusting wealth gap, the climate gone wild, the rise of authoritarianism and neo-fascism, and even the radical dislocations which the Internet, artificial intelligence, quantum computing and blockchains are already bringing us.

It may seem irrelevant, out of touch or futile to devote energy to dialectics and remote viewing in times like these, but extreme circumstances call for extreme measures and both tried-and-true and out-of-the-box thinking may have an important role to play in transcending these crises.

In the chapters and several appendixes of the Sourcebook I have presented the views and practices of revolutionaries, Marxists, Marxist-Leninists, Leftist and mainstream scientists and philosophers. I've offered my opinions in comment form and have included a few pieces I've written. For example, on principles and compromises and on "Left" and right errors (in Appendix 4). Noam Chomsky expresses my views on postmodern philosophizing (Appendix 5), and indeed I've included only a few such authors in the book. In Appendix 6 *Crust* conveys what I think about the "New Materialism." (TL:dr: It's not favorable.)

Previous chapters have taken a look at fundamental questions that have come up in mainstream philosophy and in Marxism such as:

- Is Materialism or Idealism the better philosophy, or are both inadequate?
- How do we define materialism and is it a viable philosophical position in light of the reality of remote viewing and other forms of psi?
- How do we explain consciousness?
- Is monism or dualism the more accurate philosophy?
- Is Dialectical Materialism a philosophical system, a method, a practice or what?
- Whatever it is, is DM correct? Is it useful?
- Is there one law of dialectics, three laws, or that's not the approach to take?
- How does the logic of dialectics relate to traditional logic?
- Are there fundamental constituents, irreducible elements or is there no end to finding smaller and structures?
- Has quantum mechanics destroyed the idea of causality in the subatomic realm?
- Is dialectics (still) useful for making radical social change? Is Mao's idea of the principal contradiction an essential tool in a progressive arsenal?

I have already given or implied my opinion on some of these. For the rest of this chapter, I will focus on the following, attempting some summing up but not addressing every issue.

- 1) Logic
- 2) Dialectics - Mao's principles, his legacy and present-day China
- 3) Mind-Body, Idealism-Materialism - revisiting the topic
- 4) Remote viewing- prospects and challenges
- 5) Pandora's Box

## Logic

Logic has been addressed in the Preliminary remarks and in passages throughout the Sourcebook.

Logic is polysemous; that is, it has many forms and meanings, and has been that way since its inception. There is not just one form of logic, though in everyday life perhaps we think there is. For example, the default is to tend to think something either is or it is not. There's no middle ground. I suspect that would be the finding in a survey of the public. 'You're right or you're wrong.' But in fact, as we have seen, there are many forms of logic, many structures, many uses. There is two-valued logic, four-valued and many-valued logic.

Does "dialectical logic" exist? Yes, it does. We can cite the scientists who say it has helped them in developing their theories, which is existence enough. And we can cite revolutionaries like Mao who not only claim dialectics exists but "proved it" through thirty years of trial and error during the Chinese revolution. Erroneous political lines wiped out 90% of the party and all but destroyed the revolutionary movement for national liberation in China. It's a wonder the Communist Party ever recovered. But it did, and the movement eventually gained enough strength so that the nation, led by the Communist Party, was able to take power. China had at long last "stood up." This was in part the result of the correct application of dialectics to the specific problems of making a revolution in that enormous country. With its millions of peasants, and a relatively small working class, this was an unprecedented and enormous feat.

Whether we in the industrialized countries can ever utilize "dialectical logic" -- Marxist dialectics -- to make fundamental change remains an open question.

## A word of caution about my opinions

In examining and evaluating questions of dialectics, one inevitably looks at the results of its application -- and the Sourcebook has done so, particularly in the numerous excerpts relating to the Chinese revolution -- Mao's contributions. I will do the same in what follows -- opinions about dialectics and what has transpired following Mao's death. Which leads me to say something about the forming of these opinions.

I took part in a movement trying to build a revolutionary party in the most powerful capitalist country on the planet. We were in "the Belly of the Beast". Our chances were slim, and we failed. We were young and inexperienced and we turned to the socialist countries and their leaders for guidance. Since the Soviet Union and China were at odds, with China accusing the USSR of being revisionists, we undertook a lot of study to find out where we stood. Following the lead of the Chinese party, groups on the left developed political lines on all manner of issues around the globe.

On some we were correct -- e.g. supporting El Salvador against US domination or supporting Eritrea against Ethiopia. On others we developed lines when in fact we didn't know enough about what was happening -- and I include enough about China in that assessment. Our segment of the movement strongly supported the CCP, as earlier would-be revolutionaries in the US completely supported Soviet Russia. We were partially blind, but didn't know it.

Because of this history, I am much more cautious in reaching opinions about international (or domestic) matters. I still do venture them though. For example, it's my belief, contrary to Noam Chomsky and Professor Mearsheimer, that the Russia-Ukraine war was caused by Russia's blatant invasion of Ukraine and is not a so-called "proxy war" that the United States is somehow responsible for. But as I say, I'm cautious. So consider at least some of the following opinions tentative and provisional, both on political history and issues and on philosophical questions.

### **Principles of dialectics**

Let's briefly revisit a few of the questions of dialectics. Does the law of the excluded middle (LEM) apply universally? Is the negation of the negation, in a Hegelian or other version, an essential part of dialectics? What about the principal contradiction?

The Russian and Chinese revolutions took place without any explicit attention to the "negation of the negation" and I don't see a need to include it in one's strategic and tactical arsenal.

The law of the excluded middle (LEM) is a principle of formal logic, but as Levins, Lewontin, and Feynman show, reality is far more complex, far more interconnected, far more mutually influencing than the LEM contemplates. So, useful in formal logic but not in biology and physics. Of course in political life, a person is either elected or not, an office is either filled or not. In a war, a battle may be won or lost, but which it is may not be clear-cut.

The principal contradiction has proved itself in practice in the Chinese revolution and others. Yet revolutions have been made without it -- by finding what's primary in a situation and honing in on that, but not using all of Mao's conceptual arsenal: principal contradiction, primary aspect, secondary aspect, antagonistic and non-antagonistic, etc. I don't see a reason to discard the principal contradiction, but it doesn't seem to be essential either.

Naturally, a question comes up -- What? You support Mao's strategic approach to revolution? With all the disruption, famine, tragedy that took place in China under his watch?

Several points in reply:

First, all the major socialist revolutions of the 20<sup>th</sup> Century ended in one kind of failure or another -- most notably the two largest, the Russian and the Chinese. Did they come "too early," before the material conditions for them had ripened? Were they voluntaristic? Shouldn't have happened?

My perspective is that just as capitalism cropped up and was beaten down by feudal authorities for a couple hundred years, so too socialism, with a presumed path to communism, has raised its head several times and been defeated. In the most significant intervention, after the October revolution



in 1917, the capitalist countries sent more than a dozen armies to try to crush the workers and peasants who had dared to stand up and form a government opposed to Tsarism and to capital.

Does this mean that the Russians and the Chinese should not have tried to make a revolution? That the Bolsheviks should have refused to seize power in the October revolution? I think not. Russia broke ground, established a new form of government representing the people and not the ruling classes. There were many positive scientific and social accomplishments as well, even during the brutal years in the Stalin era. They showed it could be done.

Second, we have been subjected to extensive and very skilled CIA and social media propaganda about China -- and about any other society that edges away from imperialism such as Guatemala under Árbenz (1954), Brazil under Goulart (1964), Dominican Republic under Bosch (1965), Chile under Allende (1973), and Nicaragua under the Sandinistas (1980s).

Mao and the CCP were vilified before and after defeating the Japanese invaders and the Kuomintang and achieving national liberation. There were no doubt great tragedies in China after 1949 as the party and people tried to construct a socialist society. The tragedies were real and should not be ignored or concealed. At the same time, knowing something of the dirty deeds the CIA has perpetrated in many countries and how it and the media portray governments moving toward national sovereignty or revolution, I am skeptical of the accounts from these sources, including about the Cultural Revolution, “30 million dying of famine under Mao”, etc.

Further, we now have a very contradictory situation in China. It claims to be Communist yet has allowed businessmen to thrive -- to such an extreme that in 2023 there were between 500 and 1000 billionaires! The CCP has fostered capitalistic practices ever since Deng Hsiao-Ping returned to power. His sayings included:

It doesn't matter if a cat is black or white, so long as it catches mice.

Let some people get rich first.

There are no fundamental contradictions between a socialist system and a market economy.

The chief criterion (for telling whether the road is capitalist or socialist) should be whether it promotes the growth of the productive forces in a socialist society, increases the overall strength of the socialist state and raises living standards.

Our basic goal — to build socialism — is correct, but we are still trying to figure out what socialism is and how to build it.

Sources:

[https://en.wikiquote.org/wiki/Deng\\_Xiaoping](https://en.wikiquote.org/wiki/Deng_Xiaoping)

[https://www.chinadaily.com.cn/china/2014-08/20/content\\_18453523.htm](https://www.chinadaily.com.cn/china/2014-08/20/content_18453523.htm)

How will China stay on its alleged path to socialism -- for decades still to come they say -- and beat back the capitalist mentality and practices the Communist Party has fostered? The situation is such that Leftists around the world don't want to talk about the capitalism that manifestly exists in China, nor do right-wingers who fear-monger about the “evil Communists” there.

I mention all this because it was Mao who warned about “capitalist roaders” who would likely be a threat throughout the period of transition to communism:

When we become a modernized, industrialized and highly cultured great power 15 years hence, we may possibly become too cocky and raise our tail sky high.

Deng Hsiao-ping was one of those capitalist-roaders whom Mao called out. But Mao’s warnings about the danger have long since been rejected by the CCP and we now have this odd hybrid communist-capitalist society in China.

Besides capitalist-oriented and now immensely powerful China, we are still confronted with the ongoing imperialism of the United States (no need to mince words), the rise of authoritarianism and neo-fascism in many countries, and capitalist Russia flexing its Tsarist (and Soviet era) muscles with its brutal invasion of Ukraine and imperial schemes to invade other countries in Europe. Can a socialist path emerge from all this? The prospects would appear to be slight.

### **Further thoughts about the principal contradiction**

In reading documents for the Sourcebook I’ve been impressed with the stress on approximation by scientists. Even mathematical equations that produce highly accurate results are an approximation to physical reality -- so say Richard Feynman, David Bohm, and Bertrand Russell. Physical theories are models and there is a difference of opinion about whether the models simply vary in their usefulness or whether we achieve more and more “correct models” over time. Marxists generally uphold the latter, as do some physicists. I prefer that conclusion myself.

As already noted, David Bohm postulates that there are subtler and subtler layers to reality and he goes deeper than most Marxists in describing the interrelationship of “subject” and “object,” saying that each IS the other (as they say) to such an extent that they are not distinct from one another; that it is not correct to think of them as subject and object.

The idea of the depth of the interrelationship of everything, the interpenetrating influence of elements in a contradiction, opens the door to overdetermination. That is the idea -- one version at any rate -- that there is no single factor that is the determining cause among many that exist in a situation. That in turn calls into question whether the idea of a principal contradiction is applicable to all situations.

As an analogy: there is a rain cloud in the sky. Precipitation occurs and rains falls to the ground. From a relatively formless cloud, material objects emerge -- raindrops fall. Does the rain cloud have a principal contradiction?

Isn’t it instead the case that a principal contradiction emerges only when humans have a need and want to meet it?

Does a rock have a principal contradiction as it sits there on the ground? It can be said to exist as the unity and struggle of opposites; for example, of the molecular structures which form it. And eventually the rock falls part or is destroyed by a hammer or an explosion. If people want to know

the “best uses of the rock,” they generate theories, perform experiments, work very hard and eventually produce...U-238 from uranium ore. In that situation there are issues to be solved, specifically contradictions that arise in the processes of converting the rock into U-238. Humans bring out and resolve the principal contradiction in any particular aspect of the process.

Moving from a natural object, does a country have a principal contradiction? Given that a country is a legal and a physical entity, we can say that a principal contradiction may arise when the country is invaded. The invader may want to reduce the territory it controls or even dissolve the country as an entity. But this is only from a human take on the situation. The land as it lies there, absent humans, does not have a principal contradiction.

In short, I’m revisiting the idea that while dialectical processes may indeed apply in nature and in society, the idea of a principal contradiction arises only when humans apply their minds to a situation.

Let’s turn to further exploration of perhaps the key critical philosophical issue.

### **Mind-Body, Idealism-Materialism**

I’ve grouped responses and solutions by authors in Sourcebook about this eternal issue into the following categories:

**Simple:** Searle

**Agnostic:** Haldane, Chalmers, Feynman

**Materialist:** Marx, Engels, Plekhanov, Lenin, Trotsky, Bukharin, Mao, Rosenfeld; Lewontin and Levins

**Beyond Materialism:** Whitehead, Sheldrake, Bohm

Why not a category for **Idealism**? It hasn’t received much attention here, but after all the book is about Marxist dialectics, not Hegelian dialectics. And these three thinkers, who went “beyond materialism,” have idealist or semi-idealist sides, to one degree or another.

In addition Part Two of MarxPsi did introduce remote viewing and psi, many practitioners of which are Idealists. Indeed, nearly all my coworkers and friends in remote viewing are Idealists. The feeling is, Hey, wake up! Materialism is dead! How can you even think Materialism is correct? You know and we know that remote viewing is real and that means Materialism fails! That’s the dominant view in the remote viewing community. My friend Marty Rosenblatt’s mantra is “Consciousness is the fundamental” and highly esteemed parapsychology scholar Jeff Mishlove agrees. Materialists are few and far between.

Of the giants of Idealism, Bishop Berkeley and Hegel have been briefly touched on in this book. Quantum pioneers Erwin Schrödinger and Max Planck appear to be of much the same mind on that subject. Present-day scholars like Donald Hoffman and Bernardo Kastrup also bask in the

clarity of the “Light Side”. If it isn’t evident by now, I prefer the “dark side” with its fuzzy shadows -- if I have to choose. But do I have to choose the binary approach? I explore that below.

The first category is **Simple**. That is, ‘Problem? What Problem?’

**John Searle**, *The Rediscovery of the Mind* (1992; 1994 MIT edition),

p1 in text

*The Solution to the Mind-Body Problem and Why Many Prefer the Problem to the Solution*

The famous mind-body problem, the source of so much controversy over the past two millennia, has a simple solution. This solution has been available to any educated person since serious work began on the brain nearly a century ago, and, in a sense, we all know it to be true. Here it is: **Mental phenomena are caused by neurophysiological processes in the brain and are themselves features of the brain.**

[Emphasis added above and in the following excerpts.]

JK: There you have it - that’s all there is to it! However, unfortunately, this solution simply fails - falls flat on its brain -- as many passages in this book have demonstrated. The mind extends beyond the brain, beyond the body. Not to mention the lesser point that research has shown that the gut also plays a role in consciousness. Even for reductionists, it can’t be just about the brain.

## **The Agnostics**

### **JBS Haldane:**

...Now a student of academic philosophy who takes up a study of Marxism will at first be disappointed. A great many questions are left unanswered, for two different reasons. Some were shown to be improperly put, and it was sufficient to demonstrate the historical reasons why they had been asked in the past. Others could not be answered on the existing data. **Thus the relation between brain and mind is not in principle an insoluble problem; but it cannot be solved, except in the most summary manner, until we know a very great deal more, particularly about the brain.**

### **David Chalmers:**

As I see things, the best options for a nonreductionist are type-D dualism, type-E dualism, or type-F monism: that is, interactionism, epiphenomenalism, or panprotopsyism. If we acknowledge the epistemic gap between the physical and the phenomenal, and we rule out primitive identities and strong necessities, then we are led to a disjunction of these three views. Each of the views has at least some promise, and none have clear fatal flaws. For my part, I give some credence to each of them. I think that in some ways the type-F view is the most appealing, but this sense is largely grounded in aesthetic considerations whose force is unclear.

**...The choice between these three views may depend in large part on the development of specific theories within these frameworks. Especially for the type-D view and type-F view, further theoretical work is crucial in assessing the theories (e.g., in explicating quantum interactionism, or in understanding phenomenal composition).**

JK: In other words, he doesn't know, isn't prepared to say which of the "types" may provide a solution.

**Richard Feynman:**

JK: I didn't come across an explicit statement by Feynman on this issue, but I include him in this category because of passages like the following:

**When philosophical ideas associated with science are dragged into another field, they are usually completely distorted. Therefore we shall confine our remarks as much as possible to physics itself.**

...Any simple idea is approximate; as an illustration, consider an object...what is an object? **Philosophers are always saying, "Well, just take a chair for example." The moment they say that, you know that they do not know what they are talking about any more.** What is a chair? Well, a chair is a certain thing over there...certain? how certain? The atoms are evaporating from it from time to time—not many atoms, but a few—dirt falls on it and gets dissolved in the paint; so to define a chair precisely, to say exactly which atoms are chair, and which atoms are air, or which atoms are dirt, or which atoms are paint that belongs to the chair is impossible. So the mass of a chair can be defined only approximately. In the same way, to define the mass of a single object is impossible, because there are not any single, left-alone objects in the world—every object is a mixture of a lot of things, so we can deal with it only as a series of approximations and idealizations.

...The problem has been raised: if a tree falls in a forest and there is nobody there to hear it, does it make a noise? A *real* tree falling in a *real* forest makes a sound, of course, even if nobody is there. Even if no one is present to hear it, there are other traces left. The sound will shake some leaves, and if we were careful enough we might find somewhere that some thorn had rubbed against a leaf and made a tiny scratch that could not be explained unless we assumed the leaf were vibrating. So in a certain sense we would have to admit that there is a sound made. **We might ask: was there a *sensation* of sound? No, sensations have to do, presumably, with consciousness. And whether ants are conscious and whether there were ants in the forest, or whether the tree was conscious, we do not know. Let us leave the problem in that form.**

**The Materialists:**

This book has included selections from Marx, Engels, Plekhanov, Kautsky, Lenin, Trotsky, Bukharin, Mao, Levins and Lewontin.

Also from Léon Rosenfeld, J.D. Bernal, Ernst Mayr, Jose Maria Sison, Ramesh Chandra Majumdar, Nagalingam Sanmugathasan, T.A. Jackson, Amilcar Cabral, Samora Machel, José Carlos Mariátegui, Shoichi Sakata, and Mitsuo Taketani

It's evident they are all materialists, and most of them are Marxists - dialectical materialists.

Has any of them solved the mind-body problem? Since they did not know or rejected the idea that psi is real, we have to say, 'No, they haven't.' At best, their materialism is incomplete, it's missing something. (At worst, it's just in denial.)

Further, as Mao says, we Marxists are never 100% correct in developing political lines -- and I would add not in philosophy either. We make errors in every endeavor we undertake. I don't think you can quantify it, but Mao uses percentages to make his point. It's understandable that Marxists have missed this important side of things -- the reality of psi. There has been incredible -- and irrational -- resistance to this reality. (Try Wikipedia, for example.) The entire population has been subjected to it, but certain scientists seem the most unreasonable about it. There is much more openness among regular folks, many of whom have had uncanny experiences.

In my view, among materialists Mao has the strongest "case" and track record on the philosophical-political side. And I find Levins and Lewontin the same on the biological-scientific side. Feynman is refreshing and Bohm is intriguing. Before moving on to those perspectives, let's re-taste the flavor of the classic Marxist materialist point of view to recall what we are moving beyond:

Plekhanov: Thus, contrary to what the idealists assert, **an actual and material being proves to be the subject, and thinking – the predicate. Herein lies the only possible solution of the contradiction between being and thinking.**

Lenin: The doctrine of introjection is a muddle; it smuggles in idealistic rubbish and is contradictory to **natural science, which inflexibly holds that thought is a function of the brain, that sensations, i.e., the images of the external world, exist within us, produced by the action of things on our sense-organs. The materialist elimination of the "dualism of mind and body" (i.e., materialist monism) consists in the assertion that the mind does not exist independently of the body, that mind is secondary, a function of the brain, a reflection of the external world.** (Lenin, *Collected Works, Volume 14, Materialism and empirio-criticism*, p 90 in the text)

Bukharin: Matter existed before the appearance of a thinking human; the earth existed long before the appearance of any kind of "mind" on its surface. **In other words, matter exists objectively, independently of "mind". But the psychic phenomena, the so called "mind", never and nowhere existed without matter, were never independent of matter.**

### **Beyond materialism (and physicalism):**

Quantum physics was a major challenge for philosophers and scientists, Marxist or not. Should one defend materialism or move beyond it? Should one even pose the question in binary terms (idealism-materialism)? Those who have "moved beyond" espouse many different positions on the issues, just as there are many interpretations of quantum mechanics itself. (See Appendix 9 for a list.)

Wikipedia on Quantum mechanics

[https://en.wikipedia.org/wiki/Quantum\\_mechanics](https://en.wikipedia.org/wiki/Quantum_mechanics)

Some 20th-century physicists (e.g., [Eugene Wigner](#) and [Henry Stapp](#)), and some modern physicists and science writers (e.g., [Stephen Barr](#), [Paul Davies](#), and [John Gribbin](#)) have argued that

materialism is flawed due to certain recent findings in physics, such as [quantum mechanics](#) and [chaos theory](#). According to Gribbin and Davies (1991):

Then came our Quantum theory, which totally transformed our image of matter. The old assumption that the microscopic world of atoms was simply a scaled-down version of the everyday world had to be abandoned. Newton's deterministic machine was replaced by a shadowy and paradoxical conjunction of waves and particles, governed by the laws of chance, rather than the rigid rules of causality. **An extension of the quantum theory goes beyond even this; it paints a picture in which solid matter dissolves away, to be replaced by weird excitations and vibrations of invisible field energy. Quantum physics undermines materialism because it reveals that matter has far less "substance" than we might believe.** But another development goes even further by demolishing Newton's image of matter as inert lumps. This development is the theory of chaos, which has recently gained widespread attention. —*Paul Davies and John Gribbin, The Matter Myth, Chapter 1: "The Death of Materialism"*

Digital physics is another alleged destroyer of materialism:

The objections of Davies and Gribbin are shared by proponents of [digital physics](#), who view information rather than matter as fundamental. The physicist and proponent of digital physics [John Archibald Wheeler](#) wrote, "all matter and all things physical are information-theoretic in origin and this is a participatory universe."

[https://en.wikipedia.org/wiki/Digital\\_physics](https://en.wikipedia.org/wiki/Digital_physics)

And there are the classic views of founders of quantum theory like [Max Planck](#).

As a man who has devoted his whole life to the most clear headed science, to the study of matter, I can tell you as a result of my research about atoms this much: **There is no matter as such.** All matter originates and exists only by virtue of a force which brings the particle of an atom to vibration and holds this most minute solar system of the atom together. **We must assume behind this force the existence of a conscious and intelligent Mind. This Mind is the matrix of all matter.**

—*Max Planck, Das Wesen der Materie (1944)*

[James Jeans](#) concurred with Planck, saying, "**The Universe begins to look more like a great thought than like a great machine.** Mind no longer appears to be an accidental intruder into the realm of matter."

[Rudolf Peierls](#), a physicist who played a major role in the [Manhattan Project](#), rejected materialism: "**The premise that you can describe in terms of physics the whole function of a human being ... including knowledge and consciousness, is untenable. There is still something missing.**"

[Erwin Schrödinger](#) said, "Consciousness cannot be accounted for in physical terms. For consciousness is absolutely fundamental. It cannot be accounted for in terms of anything else."

Another "beyond" is Alexander Spirkin (a Soviet era philosopher):

**Consciousness is always connected with neurophysiological processes and does not exist outside these processes.** But they are not what constitutes its essence. Science will undoubtedly one day "reduce" mental phenomena to the biochemical and ergo-informational processes in the brain. But this will not explain the essence of consciousness, although the connection between the spiritual and the material will be understood in greater depth and subtlety. It would appear that the building of sensory and conceptual models in the human brain, when it reflects what exists or constructs what should exist, that is, sets an aim, is connected with bioergo-informational phenomena. **In its material fabric mental activity is bioergo-informational and at the same time it is a spiritual image of existing or potential reality.** This is why it can perform not only its reflective-constructive but also its regulative role in the system of the organism and in the relations between the organism and the surrounding world.

JK: By introducing the idea of "biogeno-ergo-informational phenomena" Spirkin departs from the usual limits of dialectical materialist concepts about the issue but remains a materialist.

Biologist **Rupert Sheldrake** finds the tenets of materialism too limiting and posits "morphic fields" as the concept with which to understand the mind-body dilemma.

Sheldrake:

**The fundamental proposition of materialism is that matter is the only reality. Therefore consciousness is nothing but brain activity. However, among researchers in neuroscience and consciousness studies there is no consensus.** Leading journals such as Behavioural and Brain Sciences and the Journal of Consciousness Studies publish many articles that reveal deep problems with the materialist doctrine. For example, Steven Lehar argues that inside our heads there must be a miniaturized virtual-reality full-colour three-dimensional replica of the world. When we look at the sky, the sky is in our heads. Our skulls are beyond the sky. Others, like the psychologist Max Velmans, argue that virtual reality displays are not confined to our brains; they are life-sized, not miniaturized. Our visual perceptions are outside our skulls, just where they seem to be. The philosopher David Chalmers has called the very existence of subjective experience the "hard problem" of consciousness because it defies explanation in terms of mechanisms. Even if we understand how eyes and brains respond to red light, for example, the quality of redness is still unaccounted for.

Sheldrake:

Morphic fields also underlie our perceptions, thoughts and other mental processes. The morphic fields of mental activities are called mental fields. Through mental fields, the extended mind reaches out into the environment through attention and intention, and connects with other members of social groups. These fields help explain telepathy, the sense of being stared at, clairvoyance and psychokinesis. They may also help in the understanding of premonitions and precognitions through intentions projecting into the future.



JK: These seem like promising ideas but to date there is no hard evidence of morphic fields.

### **David Bohm**

Quantum physicist David Bohm went beyond posing materialism vs. idealism. He took a broader perspective, reaching what seems to be a form of panpsychism -- the idea that there is a rudimentary element of consciousness in every supposedly material thing. However, Bohm questions whether there are separate material things.

Bohm:

**...the whole notion of active information suggests a rudimentary mind-like behaviour of matter, for an essential quality of mind is just the activity of form, rather than of substance.**

**...It seems clear from all this that at least in the context of the processes of thought, there is a kind of active information that is simultaneously physical and mental in nature.** Active information can thus serve as a kind of link or 'bridge' between these two sides of reality as a whole. These two sides are inseparable, in the sense that information contained in thought, which we feel to be on the 'mental' side, is at the same time a related neurophysiological, chemical, and physical activity (which is clearly what is meant by the 'material' side of this thought).

**... If the thing and the thought about it have their ground in the one undefinable and unknown totality of flux, then the attempt to explain their relationship by supposing that the thought is in reflective correspondence with the thing has no meaning, for both thought and thing are forms abstracted from the total process.** The reason why these forms are related could only be in the ground from which they arise, but there can be no way of discussing reflective correspondence in this ground, because reflective correspondence implies knowledge, while the ground is beyond what can be assimilated in the content of knowledge.

JK: Stimulating and maybe profound, but I have trouble grasping Bohm's "implicate" and "explicate" orders (which he is referring to). And how does one detect and experiment with each of these orders?

I find Bohm's views fascinating and at times instructive. He is a pioneering quantum physicist whose views deserves respect. He was a Marxist and was apparently trying to preserve a materialist viewpoint. A particle is real, and guided by a "pilot wave" -- it's not just a probability function. But Bohm finds reality to be very "subtle" -- an unusual word in this context but a very key concept for him. I have to say, it's too subtle for me to have an understanding of. Nonetheless, if I had to "declare", I would say that some form of "panpsychism" may be our best bet to understand both the physical and the psychic.

A tremendous amount of experimentation that has taken place on the brain, the gut, neurons, and the body in cognitive science research in the past few decades and this has advanced our understanding of what the "biomind" (Swann's term) does and what it does not do. For example, we now know how active the neuronal networks are, the incredible amount of inhibitory feedback circuits and pathways that exist. From the placement of electrodes, we are beginning to be able to recreate images that our eyes are seeing. As with the development of science in other fields,

advanced technology leads to insights about structures and processes that were previously opaque or literally unseeable. I'm thinking of the insights about human and animal vision, memory, unconscious and conscious processes, pathways, and so on. High-end technology helps implement the change in paradigm which is upon us.

For an overview of these developments, and the vast amount we do not know, check out this 50-page paper from 2024 by twenty scientists. (the Abstract is in the Bibliography)

*The sounds of science—a symphony for many instruments and voices: part II*

<https://doi.org/10.1088/1402-4896/ad2abe>

David Bohm takes things even further than Lewontin and Levins (whom I will turn to shortly). His Whiteheadian approach forefronts the idea of process to such a degree that constancy practically disappears. Or he may just be too deep for my understanding. For example, his ideas about developments just above Planck length are fascinating, but I am certainly not qualified to say yea or nay. Freeman Dyson's statement that reality may be "infinite in all directions" comes to mind. Perhaps the most insight about physical reality packed into the fewest words, but...how do we know if it's true? We can't.

### **Alfred North Whitehead**

p182 Watts:

On Sheldrake's intellectual debt to Whitehead:

**'In Whitehead's phrase, organisms are "structures of activity" at all levels of complexity. Even subatomic particles, atoms, molecules, and crystals are organisms, and hence in some sense alive.** From the organismic point of view, life is not something that has emerged from dead matter, and that needs to be explained in terms of the added vital factors of vitalism. *All* nature is alive. The organizing principles of living organisms are different in degree but not different in kind from the organizing principles of molecules or of societies or of galaxies. "Biology is the study of the larger organisms, whereas physics is the study of the smaller organisms," as Whitehead put it'...

JK: Whitehead's writing can be obscure and unfortunately he ends up invoking God, which hardly suggests a scientific viewpoint. Surprisingly, current-day scientists and philosophers in China find Whitehead's philosophy congenial and have promoted his works and viewpoint. His emphasis on the ubiquity of process could be one of the points of attraction.

### **Lewontin and Levins**

As noted earlier, I find the views of Lewontin and Levins the most congenial in discussing biology, life, and to some extent society. They were not actively involved in trying to make revolution in the U.S., but they strongly supported Cuba (Levins made many work trips there) and as scientists they showed how dialectics is meaningful in their work in the field. I found their *Dialectical Biologist* very convincing. Lewontin and Levins hold not only that dialectics is present and active in human thinking and society, but also in the natural world.

To those who dismiss dialectics as irrelevant or nonsense, let's go ahead and cite Lewontin and Levins to the contrary! As we have seen, other prominent scientists have also found something of

value in dialectics and dialectical materialism: Leon Rosenfeld, JD Bernal, JBS Haldane, Ernst Mayr, David Bohm, Shoichi Sakata, and Mitsuo Taketani.

Lewontin and Levins note that we tend to think of things as fixed, as constant. But as we know (and Richard Feynman makes the same point), every “thing” is actually a process. It is constantly changing. To us, with our limited life spans, the changes may be very small, but they are taking place every instant. Lewontin and Levins hold that the viewpoint that sees things as static carries over into social and political philosophy: the ruling class, the bourgeoisie, now that it is in power, is quite conservative politically and economically. Over the centuries the capitalist class slowly arose and overthrew the feudal and aristocratic powers. It was revolutionary. Now the underlying assumptions are Capitalism is the best and most advanced economic system we’ve ever had. Don’t even think of revolution, you workers (and peasants)! And that perspective is promoted by the ruling powers in every way.

Lewontin and Levins may on occasion push too hard on the reality of change relative to constancy, but their perspective makes sense. Change is constant and inevitable. It can and does apply to societies as whole, as well as everyday life. The implication is that revolution is possible – if the conditions are right and you prepare for it.

### **The prospects and challenges of remote viewing**

Remote viewing was introduced in Chapter 8 and expanded on in Appendix 7, with a description of what remote viewing is, elements of its history, the research and operations at Stanford Research Institute (SRI) and Ft. Meade, the Russian remote viewing programs, and civilian use of RV since 1995 in training, practice, client work and more.

Remote viewing is now taught and practiced in many countries in a variety of forms. Instruction in remote viewing has been one of the most active areas, with thousands upon thousands of students being taught CRV, TDRV, TRV, SRV, HRVG, and many other so-called “method” approaches, as shown in the surveys in Chapter 8. In addition, many viewers prefer “natural remote viewing” as practiced at SRI - no formal structure, no stages; a stimulus and immediate response type of viewing.

Looking around the globe we find that Germany has an active RV community, Bulgaria a relatively large number of viewers, RV is taught in Japan and Italy, and the UK has an active core of viewers. France has one of the few successful remote viewing companies (IRIS). The International Remote Viewing Association, finally living up to its name, has reached out to viewers in Brazil, Argentina, Mexico, Canada and other countries with an eye to making RV truly an international phenomenon. China has explored QI (chi) and experimented with sensing and seeing without use of the eyes, but it is unknown if China utilizes RV. There is evidence that the US government still has an active remote viewing effort, though there is no official admission of this.

While RV is becoming widespread, just how accurate and useful is it? Unfortunately, despite hype by some, remote viewing is not consistent. Top SRI viewer Pat Price was extraordinarily accurate at times and his early sessions of a research and development facility in Russia helped get funding for the SRI program. Other times Pat Price could be wildly off. And this was true of all the top

viewers and everyone since. It appears that the practical uses of remote viewing by civilian viewers and groups have not matched the scope and depth of RV efforts during the Cold war by the Ft. Meade, SRI or the Russian program.

In the 1995-2003 period, there were only a few commercial remote viewing companies. One was (Technical Remote Viewing (TRV), founded by Ed Dames with the approval of Ingo Swann and the other was TransDimensional Systems, founded by Prudence Calabrese. Pru had no connection at all with SRI or the military. While TRV initially had a few clients, the business evidently failed since Dames turned to teaching remote viewing, promoting himself, forecasting doom, and selling merchandise and we heard no more about any client business of his. TRV was passed on to others and no details are available about whatever commercial successes it may or may not have had. If it was successful, it was entirely under wraps.

TransDimensional Systems thrived for a few years servicing quite a few clients, in particular a financial firm in New York City. TDS also received a grant of \$1 million from a Hollywood actress. However, TDS was repeatedly threatened and was told to shut down or else. Pru Calabrese did just that in March 2003. (I describe the history of TDS in my book, *Remote Viewing from the Ground Up*.)

Top-notch viewers like Ingo Swann and Joseph McMoneagle had paying clients in those early years, as can be seen in the Swann archives at the University of West Georgia and the Edwin C. May archives of SRI materials at Rice University in Houston. Reports show that Swann was hired by companies interested in minerals and oil extraction. Joe McMoneagle has had a successful remote viewing business for many years. A few other Ft. Meade viewers have apparently done private and government work as well.

At present there are only a few known successful remote viewing companies. One is the aforementioned IRIS group in France, headed by Alexis Champion. Another is the Gail Husick group based in the Washington state. A third is the Future Forecasting Group, which has had success via Patreon subscribers by providing information about cryptocurrency developments and predicting significant events in the upcoming month. In addition to these, Russia has had thriving remote viewing businesses, as per reports in *ESP Wars*.

However, while visible business or government consultation is not at a very high level, RV is being increasingly used by a growing number of individuals and groups for a variety of purposes: finding missing persons, helping friends, finding lost pets or objects, predicting outcomes of sports events, predicting cryptocurrency and stock market movements, and assisting in business and personal decisions of all kinds. Many viewers have been trained in other psi modalities and they combine methods to obtain better results than they would get with just one modality.

### **The UFO-RV connection revisited**

UFOs are now acknowledged by the Department of Defense to be real and the public climate in which they are discussed has completely changed. It's much more open and the giggle factor has virtually disappeared. Members of Congress are pushing hard to learn more from the Department of Defense and other agencies about UAP (Unidentified Aerial Phenomena). Whistleblowers like

David Grusch have come forward claiming that we possess craft and have been trying to back engineer them. Congress has passed a law requiring reports about UFOs to be prepared by government agencies.

However, the Department of Defense continues to stall and will not come clean about what it knows nor about the fact that it outright lied to the American public for many decades. In addition, established scientists have now come forward willing to put their reputations on the line to study the subject and to seek disclosure. Top-notch Stanford biologist Garry Nolan cofounded the SOL Foundation, which sponsored a high-end conference in November 2023 at Stanford University. There leading scientists and former government officials gave presentations on their research and findings to date.

The present author was fortunate enough to be able to attend the conference, along with 220 others. It was a good opportunity to ask luminaries what they thought about the possibility of using remote viewing to assist in the exploration of the UFO phenomenon. During breaks I asked five such people and these were their responses.

**Hal Puthoff** said at first that he'd have to think about it, but then suggested that one could remote view the four alien bases that Pat Price alleged were present on earth and then actually go to the sites to check them out. (Puthoff was head of Star Gate research at SRI from 1975-1985.)

**Jacques Vallée** said that since both fields are mysterious and we don't know what's going on in them, the two shouldn't be mixed. (Vallée is a prominent long-time UFO researcher and was a consultant to SRI on remote viewing.)

**Russell Targ** flatly advised, Don't mix remote viewing and UFOs. We don't know enough about either of them. They're mostly personal reports. (Targ co-founded the SRI remote viewing project along with Hal Puthoff.)

**John Alexander** said, Yes, of course you can remote view UFO's! They're very closely connected! (John Alexander is a retired Army colonel with ties to the remote viewing program and UFO research.)

**Jeff Kripal** said, How would you use RV to do that? I gave him two examples. He said, Sorry, Jon, I can't think of any examples. (Kripal is a professor of religious studies at Rice University and sponsor of the Archives of the Impossible conference.)

**Garry Nolan** had written publically that he is open to the idea so I did not ask him. At a break he took my card and told me that when he did a session with Ed May, he was very surprised by the result. It was uncanny.

So two said don't do it, two said you could, and one was non-committal. After the conference I discussed the subject with a few other old hands in the field, people who have been active for many years. Our consensus was that given the present state of remote viewing, it would be quite difficult to provide high quality information about UFOs, since UFOs are elusive, mysterious, and evasive. It would take considerable specialized training to be in a position to provide data acceptable to the

SOL scientists who are undertaking research. Further, remote viewers would have to “get it right” the first time so as not to damage the reputation of RV, and to show RV could make a contribution even in an area as difficult as this one.

## **Pandora’s box**

So remote viewing is useful and is increasingly widely practiced, but it is limited and inconsistent and in general not ready to aid scientists.

Can technology help improve remote viewing results? One member of the Future Forecasting Group expressed the opinion that the government may well have advanced technology involving sound that vastly improves results. He cited a remark by his teacher that students were using a teaspoon to plow a field when there was a back-hoe that could do it much better. Some believe hypnosis can improve viewing, but experiments at SRI did not find that to be the case. Still, the increasing knowledge of how the brain processes information may shed light on how remote viewing works and lead to improvements in techniques.

Let’s look inside Pandora’s box to explore this further. First, what sort of box are we talking about?

The box that had artificial intelligence, quantum computers, UFOs, and remote viewing in it.

One startling technological development is currently (mid-2024) practically slapping us in the face demonstrating that massive changes are coming: the tech goes by the names ChatGPT-4, Gemini, PaLM, Llama, Vicuna, Claude, Stable Beluga, StableLM, Coral, Falcon, MPT, Mixtral, XGen-7B, and Groq. These AI programs (mostly Large Language Models) are already aping the computer in A.E. Van Vogt’s seminal *World of Null-A* (1948), which answered the questions of thousands of people simultaneously. However ChatGPT-4 and the other upstarts are not an all-knowing manager of society like Van Vogt’s computer. Not yet anyway.

A second shocker, almost unleashed by Pandora, is the rapid development of quantum computers. As theoretical physicist Michio Kaku has warned, once artificial intelligence is paired with quantum computers, watch out! I asked Gemini about what this would mean and it replied:

- **Scientific breakthroughs:** Simulating complex molecules is a prime example. Quantum computers could accelerate drug discovery by allowing for more precise modeling of how medications interact with the body. This could lead to the development of new lifesaving treatments.
- **Advanced Materials Science:** Imagine designing materials with properties never before seen. By combining AI’s ability to analyze vast datasets with quantum computer’s ability to model complex systems, entirely new materials could be created for applications like superconductors or ultra-strong alloys.
- **Financial Modeling:** AI and quantum computing could improve financial modeling by taking into account a much wider range of variables and uncertainties, leading to more accurate predictions and potentially reducing the risk of financial crises.

Not only could such a combination solve difficult physics, math, chemical and biological problems - and do so very quickly - but it could also change the world of work, particularly in the advanced industrial countries. Already industrial and humanoid robots perform numerous tasks that humans do -- on the shop floor and in warehouses, restaurants, call centers. AI computers are able to perform logistical, algorithmic, and mathematical calculations far faster and more accurately than humans can. AI can now produce art, music, stories, and papers with simple verbal prompts and churn out images, videos and speech indistinguishable from a human original. New robots that can walk, trot, display digital dexterity and other human capabilities pop up monthly.

An AI computer will be far faster than a human could ever be and far “smarter”. Such a computer may demonstrate unexpected, bizarre behavior, with possibly dangerous or even catastrophic results. All known LLM models “hallucinate” at times; they make things up. AGI - artificial general intelligence may be coming and Kurzweil’s “Singularity” may occur -- the day a computer “wakes up” and takes on a form of consciousness, with unknown consequences.

A third item also in Pandora’s box is now out: UFO’s have begun interfering with training missions at US bases. After decades of cover up, ridicule and denial, the US government finally acknowledged the reality of UFOs. However, as noted, the Defense Department continues to stonewall members of Congress, Ufology experts and the public. And the news about aliens may be sobering and extremely disruptive. As well-informed former Defense Department official Lue Elizondo said:

Let me start with somber or sobering. Imagine everything you've been taught, whether it's through Sunday school or through regular formal education in school, or what our political leaders have told us. And yes, even maybe our mothers and fathers around the dinner table have told us, or maybe at bedtime about, about who we are, right?

What if all of that turned out to be not entirely accurate? In fact, the very history of our species...what it means to be a human being and our place in this universe. What if all that is now in question?...Are we prepared to, to recognize that we're not at the top of the food chain, potentially, that we're not the alpha predator that we are maybe somewhere in the middle?...What if it turns out that there's another species that is even higher on that ladder than we are?...there's gonna come a point in this conversation where we're gonna have to do a lot of reconciling with ourselves, whatever that means from whatever philosophical background you have, this is gonna impact every single one of us. The same, and equally yet differently. And I think that's important, you know. Do we find ourselves in a situation where history may have to be rewritten?

<https://app.podscribe.ai/episode/93750460>

Sounds stark, doesn't it?

UFO technology could be thousands, even millions, of years ahead of ours, according to theoretical physicist and best-selling author Michio Kaku and other experts. Our nuclear and high energy experiments could be endangering the earth, and possibly another dimension “right next to us”.

Scientists have postulated that multiple dimensions may exist and Jacques Vallée long ago expressed the view that the UFO phenomenon may be co-existing with us on earth, but in another dimension.

Let's face it - also out of the box and causing havoc are climate destruction, the growth of authoritarianism, the obscene wealth of the 1% vs. the rest, Russia's brutal invasion of Ukraine and Israel's attempted obliteration of Gaza. We face an unparalleled variety of dangers, some of which are killing people or threatening them in ways not seen since World War II.

Compared with the above societal and scientific factors, remote viewing, just emerging from Pandora's box, is not a major player. RV is too inconsistent, too vague, too iffy. As noted, if it were consistent and more reliable, it would have achieved a much greater role in society than it has.

It is possible that advances in technology will enhance RV results. If humans are physically connected with computers through implants, Neurolink or similar devices, major consequences will result. What will a human-computer entity be capable of? Perhaps enhancement of RV will result from the "synergy" of AI, quantum computers, and brain science. If so and if secrets can be sniffed out by remote viewing, governments will go ape-shit. No government tells its citizens its vital secrets and goes out of its way to prevent that from happening.

Given all of these wild cards out of the box and flying around the world, what will be the results in five, ten or fifty years? We would seem to be headed for a period of increasing turmoil and chaos, not a peaceful and harmonious world.

(A few remote viewers have mounted projects to describe what life will be like in future decades. One is the 2060 Project of remote viewing pioneer Stephan Schwartz. However, the results have not been released yet.)

Our human species has been warlike and destructive for millennia. Could it be that the aliens who appear to be monitoring us (especially our nuclear facilities) will intervene when we do something that threatens them or the planet? UFO sightings became prominent after the first explosion of the atomic bomb in 1945 and they have been noted around nuclear missile sites and facilities in the US and elsewhere.

Is our civilization on a dire path that millions in far-flung galaxies have trod before? As a civilization reaches a certain level of advanced technology such as splitting the atom or discovering its biological basis, and can meld artificial intelligence with computers, is the civilization in danger of extinguishing itself? If that is the case, aliens may intervene to prevent a catastrophe. Or they may let things play out.

Let's hope that these tentative, provisional speculations of mine prove exaggerated or outright wrong. And let's remember the one thing that remained in Pandora's box: HOPE.



## Appendixes

### Appendix 1 The Easy Way In - Dialectics for Kids, etc.

Here be easy ways in: “Dialectics for kids” and “Marxism for Normal People”.

1. Dialectics for Kids.
2. Kiddle
3. Dialectical Materialism for Dummies
4. Marxism for Newbies: Dialectical Materialism

#### 1. Dialectics for Kids

<https://dialectics4kids.org/>

The ABC's of Change - Ages 4 and up  
Popcorn, Earthquakes, and Other Changes - Ages 5 and up  
Bit by Bit . . . Then all at Once - Ages 7 and up  
Circles or Spirals? - Ages 9 and up  
Ten Ways You Turn into Your Opposite - Ages 9 and up  
Dialectics - The Musical - Songs for all ages  
Dialectics for Teachers - Exercises for students  
What the Heck is Dialectics? - For big kids  
Dialectics and the film Half Nelson - For movie goers (R rated)  
Dialectics of Global Warming - For anyone with a future  
About Us - The intergalactic dialectic collective  
Testimonials - From our clients

JK: As indicated, there are explanations for different age groups. Naturally, the entries are simple and don't aim to convey the scope of Marxist dialectics. The site includes this stimulating example by Michio Kaku, a theoretical physicist (and by the way, at one time an open Marxist-Leninist!).

#### Dialectics of Water

By Michio Kaku, from his book, *Hyperspace*, Oxford University Press, 1994

212 If we heat the ice cube on the stove, first it melts and turns into water; that is, it undergoes a phase transition [or turning point]. Now let us heat the water until it boils. It then undergoes another phase transition and turns into steam. Now continue to heat the steam to enormous temperatures. Eventually, the water molecules break up. The energy of the molecules exceeds the binding energy of the molecules, which are ripped apart into elemental hydrogen and oxygen gas.

Now we continue to heat it past 3,000 degrees K, until the atoms of hydrogen and oxygen are ripped apart. The electrons are pulled from the nucleus, and we now have a plasma (an ionized gas), often called the fourth state of matter (after gases, liquids, and solids). Although a plasma is not part of common experience, we can see it every time we look at the sun. In fact, plasma is the most common state of matter in the universe.

Now continue to heat the plasma on the stove to 1 billion degrees K, until the nuclei of hydrogen and oxygen are ripped apart, and we have a "gas" of individual neutrons and protons, similar to the interior of a neutron star.

If we heat the gas of nucleons even further to 10 trillion degrees K, these subatomic particles will turn into disassociated quarks. We will now have a gas of quarks and leptons (the electrons and neutrinos).

If we heat this gas to 1 quadrillion degrees K, the electromagnetic force and the weak force will become united. The symmetry  $SU(2) \times U(1)$  will emerge at this temperature. At 10<sup>28</sup> degrees K, the electroweak and strong forces become united, and the GUT symmetries [ $SU(5)$ ,  $O(10)$ , or  $E(6)$ ] appear.

Finally at a fabulous 10<sup>32</sup> degrees K, gravity unites with the Grand Unified Theory force, and all the symmetries of the ten-dimensional superstring appear. We now have a gas of superstrings. At that point, so much energy will have gone into the pressure cooker that the geometry of space-time may very well begin to distort, and the dimensionality of space-time may change. The space around our kitchen may very well become unstable, a rip may form in the fabric of space, and a wormhole may appear in the kitchen. At this point, it may be advisable to leave the kitchen.

## 2. Kiddle

Kiddle is an encyclopedia for kids and has entries about dialectics, Marx, Hegel, Lenin, Mao and many other Marxist and philosophers who write about and apply dialectics. One wonders what "kids" Kiddle has in mind in entries like those on Hegel for example. But they do at least include him and try to make him clear.

<https://kids.kiddle.co/>

### Examples:

#### **Dialectic Facts for Kids**

<https://kids.kiddle.co/Dialectic>

#### **Marxist Facts for kids**

<https://kids.kiddle.co/Marxism>

## 3. Dialectical Materialism For Dummies

[https://www.reddit.com/r/socialism/comments/j0cufz/dialectical\\_materialism\\_for\\_dummies](https://www.reddit.com/r/socialism/comments/j0cufz/dialectical_materialism_for_dummies)

Posted on the Socialism subReddit by u/noamasters / Ernesto "Che" Guevara

"I decided to gather my knowledge on dialectical materialism, which some find difficult to comprehend, and make it digestible and easy to understand to anyone that hasn't read Marx before. It is only a few paragraphs and I tried my best to define every term used. Thank you, please let me know your thoughts!"

## DIALECTICS AND MATERIALISM

A famous German philosopher, **Georg Hegel**, founded the modern concept of **dialectics** (Hegelian dialectics). Hegel's dialectics suggest that **everything is in motion** and that overtime this motion translates to social progress. Hegel was an **Idealist** and he thought that this social progress was

spawn out of the creation of challenging ideas, specifically in the form of the creation of a thesis → the counter of an antithesis → and the formation of a synthesis. This procedural change combined with the laws of motion suggests that there is **quantitative change** that occurs and that after a while there will yield a **qualitative change**. Hegel thought that ideas shaped the material world and that's where social progress came from. Some students of Hegelian dialectics thought it was the other way around and that the material world is where the ideas come from. They were known as **materialists** and they were a major influence on Marx.

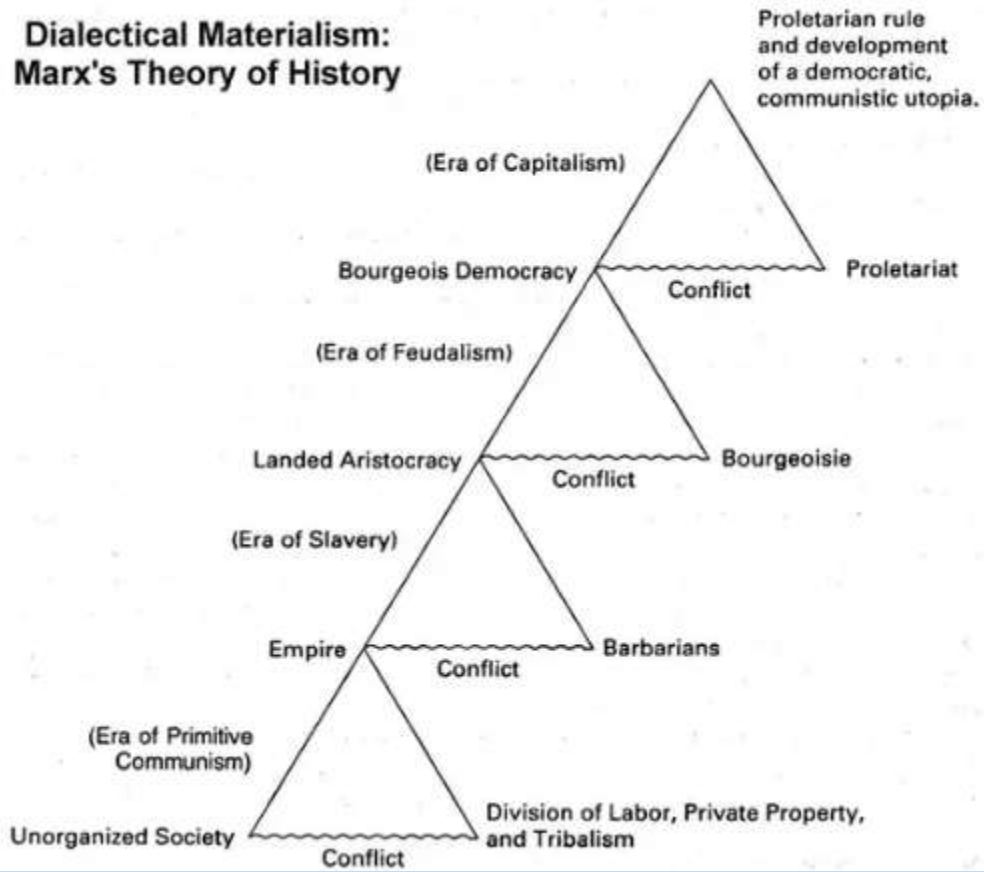
## **DIALECTICAL MATERIALISM**

**Marx** used dialectics (everything being in motion) in combination with this idea of materialism to found the backbone philosophy behind Marxism called dialectical materialism. **Dialectical materialism** argues that change is constantly happening and the reason for this change is matter opposing matter (instead of ideas opposing ideas). These oppositional forces against one another are in constant **contradiction** and this form of domination can be quantitatively measured over time. Likewise each matter has its own internal set of contradictions which change qualitative form as a response to the growing external change. This abstraction of Dialectical materialism is what guides Marx's sociological method/interpretation of the world called historical materialism.

## **HISTORICAL MATERIALISM**

**Historical materialism** asserts that the nature of society's **productive forces** and the human **relations of/around production**, together making up the **mode of production**, fundamentally determine society's organization and development. As technological progress improves the productive forces, the existing relations of production become increasingly insufficient for fully exploiting technology. This generates internal inefficiencies within the broader socioeconomic system, most notably in the form of **class conflict**. The obsolete social arrangements prevent further social progress while generating increasingly severe **contradictions** (quantitative change) which develop to a point where the system can no longer sustain itself and is overthrown through internal **social revolution** (qualitative change) that allows for the emergence of new forms of social relations that are compatible with the current level of technology. This perspective of history through dialectics explains the rise and fall of the various modes of productions that have existed throughout history such as primitive division of labor, slavery, feudalism, and **capitalism**.

## Dialectical Materialism: Marx's Theory of History



#### 4. Marxism for Newbies: Dialectical Materialism

by Dash the Internet Marxist

<https://dashthered.medium.com/marxism-for-normal-people-dialectical-materialism-deb5034685a4>

JK: Done with great clarity and humor! The emphasis is on the difference between materialism and idealism, profusely illustrated.



“Gaze into my dialectics, and tell me, what do you see?”

## Appendix 2 Applications of the Principal Contradiction

Revolutionary and progressive groups around the world have embraced the idea of the principal contradiction. Below are 41 groups that did so, with the majority in Third World countries. The period is 1958 to 2022.

I used these categories for the two sides of the principal contradiction: people, class, women, indigenous, ideals, and system. The systems referred to include capitalism, colonialism, imperialism, and patriarchy. There is a summary following the table.

1	Year	Organization	Term 1 in Principal Contradiction	Term 2 in Principal Contradiction	Area of application	Type
2	1955	National Liberation Front (Algeria)	Algerian people	French colonialism	Algeria	people - system
3	1956	Chinese CP (Resolution 8th Congress)	advanced social system	backward social productive forces	China	system - system
4	1960	National Liberation Front	Vietnamese people	U.S. imperialism	Vietnam	people - system
5	1969	Palestinian Liberation Organization	Palestinian people	Zionist movement	Palestine	people - system
6	1994	Zapatista Army of National Liberation	neoliberal economic system	indigenous peoples of Mexico	Mexico	system - people
7	2003	Workers World Party	imperialism	oppressed peoples of world	world	system - people
8	2011	Egyptian Revolutionaries Ag. Torture	dictatorship	people	Egypt	system - people
9	2014	Communist Party of China	ever-growing needs of the people for a better life	unbalanced and inadequate development	China	people - system
10	2016	International Socialist Organization	globalized socialized production	capitalist private ownership of means of production	world	system - system
11	2016-17	Black Lives Matter Global Network	stated ideals of America	reality of white supremacy and racial capitalism	Black people in United States	ideals - system
12	2018	International Marxist Tendency	capitalist system	liberation of women	world	status - women
13	2018	Extinction Rebellion	current economic system	a sustainable future	world	system - system
14	2019	International Indigenous Peoples Movement	colonial system	self-determination of indigenous peoples	indigenous peoples	system - indigenous
15	2020	Sunrise Movement	urgent need to address climate crisis	greed of the fossil fuel industry	environment	system - system
16	2021	Coalition on Violence Against Women	patriarchal system	liberation of women	women	system - women
17	2021	Climate Justice Alliance	capitalist imperialism	climate justice	environment	system - system
18	2021	Indigenous Peoples of Americas Council	colonial system	self-determination of indigenous peoples	indigenous people in Americas	system - indigenous
19	2022	Democratic Socialists of America	interests of the working class	interests of the capitalist class	United States	class - class
20	2022	Feminist Majority Foundation	patriarchy	gender equality	women	system - women
21	2022	Sisters in Struggle (India)	patriarchy	socialism	women	system - women
22	2022	350.org	extractive economy	natural world	environment	system - system
23	2022	National Congress of American Indians	colonial system	sovereignty of indigenous peoples	indigenous peoples	system - indigenous
24	2022	Assembly of First Nations	colonial system	self-termination of First Nations peoples	First Nation people in Canada	system - indigenous
25	1955 /1985	African National Congress	white minority regime	black majority	South Africa	system - Blacks
26		Bolivarian Revolution (Venezuela)	Venezuelan people	US imperialism	Venezuela	people - system
27		Communist Party of Pakistan (CPP)	Pakistani people	imperialism	Pakistan	people - system
28		Communist Party Nepal (Unified M-L)	Nepali people	Nepali ruling class	Nepal	people - class
29		Communist Party Nepal-Revolutionary	Nepali people	Nepali ruling class	Nepal	people - class
30		Communist Party India (M-L)	Indian people	Indian ruling class	India	people - class
31		Communist Party of India (Marxist)	working class	bourgeoisie	India	class - class
32		Mazdoor Kisan Party (MKP)	Pakistani people	Pakistani ruling class	Pakistan	people - class
33		Makkal Janadhikaram (MAKJAN)	Indian people	Indian ruling class	India	people - class
34		People's War Group (PWG) (Nepal)	Nepali people	Nepali ruling class	Nepal	people - class
35		People's Liberation Army (India)	Indian people	imperialism	India	people - system
36		Partido dos Trabalhadores (Brazil)	national capital	imperialism	Brazil	system - system
37		Rojava Revolution (Syria)	Kurdish people	Syrian state	Rojava	people - system
38		Revolutionary Communist Party of India (Leninist)	Indian people	Indian ruling class	India	people - class
39		Revolutionary Communist Party, USA	proletariat	bourgeoisie	United States	class - class
40		Syriza	working class	oligarchy	Syria	class - class
41		Standing Rock Uprising (United States)	fossil fuel industry	indigenous peoples of the United States	United States	system - indigenous
42		Socialist Alternative	capitalism	socialism	world	system - system

### Terms used to categorize the principal contradiction

The Marxist category that one might expect to be most common, class, appears in only 20% of these instances. The location of the majority of these groups in the Third World accounts for the fact that ‘people’ (that is, multiple classes) appears 23.3% of the time as a term and the combination of people plus women and indigenous peoples appears 33% of the time.

Category	Term 1	Term 2	Total
people	15	3	18
system	18	17	35
class	4	11	15
women	0	4	4
indigenous people	0	4	4
ideals	1	0	1
people, women, indigenous	26		33.7%
class	15		19.4%
system	35		45.4%

### **Appendix 3 Dialectics in the New Communist Movement**

Let's examine a few examples of how dialectics was applied -- and misapplied -- in the Anti-Revisionist New Communist Movement (NCM) in the 1970's and early 1980's.

#### **Background**

The New Communist Movement developed following the upsurge of the 1960's. There was a socialist bloc of countries (e.g. Russia, China, Cuba, Albania) whose governing parties were Marxist-Leninist and were upholders of Dialectical Materialism. In addition national liberation struggles in many countries were attempting to end colonialism or semi-colonialism and move toward socialism. In the United States and throughout the world young people witnessed these developments, started Marxist study groups and attempted to apply Marxism in their countries.

In the United States, China Books (a bookstore in San Francisco) and Progress Publishers made available inexpensive editions of the classics of Marxism for people eager to study the great things they thought were being accomplished around the world using the dialectical materialist method. (And many positive things were in fact accomplished in those years.)

Out of this initial ferment, in the United States and elsewhere energetic but naïve communist movements arose. Since the existing socialist countries had been led by revolutionary parties, the idea of forming an equivalent party -- a party of "professional revolutionaries" -- was high on the agenda. In the U.S. the plethora of study groups and pre-party formations coalesced into tendencies and "wings."

Given that the NCM was "in the belly of the beast", the most powerful capitalist nation on earth, our work was cut out for us. Although revolution was "in the air," and groups were champing at the bit to declare themselves the party, many of us did not think we were in a situation in which a strong party could be formed. We simply weren't ready. People in all the nooks and crannies of the NCM read the classics, the literature from the socialist countries, the pamphlets and papers emerging from the new Marxist groups, and got a job, went to work -- primarily in factories since the watchword of Communist thought throughout the 20<sup>th</sup> Century was that the industrial working class would be the most solid force for revolution.

Nonetheless, in fairly short order, one by one, quite small groups, representing only a tiny fraction of the would-be revolutionaries, declared themselves "the Party." This was a dismaying development to those of us who did not believe any of the groups had established a sound basis to declare themselves a party. So we refused to join any of them. Regardless, "parties" were created until there were, unbelievably and ridiculously, EIGHT such self-declared sole Vanguards of the Revolution:

Revolutionary Communist Party (RCP)  
Communist Party (Marxist-Leninist) (CP-ML)  
Communist Party of the United States of America (ML)(CPUSA-ML)  
Communist Labor Party (CLP)  
Communist Workers Party (CWP)



Progressive Labor Party (PLP)  
Democratic Workers Party (DWP)  
Central Organization of U.S. Marxist-Leninists (COUSML)/Marxist-Leninist Party USA (MLP).

As Mao was to the Chinese and as Ho Chi Minh was to the Vietnamese, as Fidel Castro was to the Cubans, and as Enver Hoxha was to the Albanians, so the following “Maximum Leaders” were to these “parties”. And so we witnessed a parade of the “Chairmen”:

Bob Avakian - Revolutionary Communist Party  
Mike Klonsky - Communist Party - Marxist-Leninist  
Barry Weisberg - Communist Party USA - Marxist-Leninist  
Nelson Peery (or Perry) - Communist Labor Party  
Jerry Tung - Communist Workers Party  
Milt Rosen - Progressive Labor Party  
Marlene Dixon - Democratic Workers Party  
(An exception?) - COUSML/MLP - Central Organization of US Marxist-Leninists/Marxist-Leninist Party

We were faced with several huge barriers in the anti-revisionist movement in the United States. While some members and leaders of these groups had been “red diaper babies,” there was little or no continuity with the groups representing past efforts to build a revolutionary party in the US. None of the previous organizations had ever mounted a significant challenge to capitalist control of the country, despite the hyped “red scares” from the 1930s through the 1950s. But there were no doubt positive and negative lessons that could have been learned from them. We studied the history of some of these groups and thought we knew their mistakes, but it was not a deep knowledge. It was not an institutional knowledge.

The members and leaders of the “parties,” collectives and independent individuals in the NCM were young and inexperienced. Many were students and few were from the working class. From a Marxist standpoint there had to be, and it seems evident there was, a strong petty-bourgeois cast to the movement. Each group wanted to be “the franchise.” The country had a strong history of individualism, magnified in some ways during the free-flowing 1960s and this did not bode well for a collective approach.

The background for the party-building effort included a ruling class which had honed its weapons of anti-communism - and the American public had bought it. This dated back to the 1917 Palmer Raids by the FBI -- and even before that (See *Red Hunting in the Promised Land*, by Joel Kovel.) Russia was painted as ultimate evil. “Better dead than red” had seeped into the American consciousness. Many of us, following the lead of the Chinese, did not support the Soviet Union, but that did nothing to diminish the anti-Communism that dominated discourse and the consciousness of the population.

In that difficult environment, organizational posturing and strutting appeared. Sectarianism was rampant. **Each of these groups put the aspirations and needs of their own tiny group above the needs of the movement as a whole.** How else would you characterize the formation of the eight “mini-parties”?

The death of Mao in 1976 cut the legs out from under the Maoist (Marxism-Leninism-Mao Zedong Thought) groups around the globe. Then the Soviet Union disintegrated in 1991 and over time each of the anti-revisionist “parties” shriveled and with a few exceptions (RCP, PL) disappeared.

A few groups like Liberation Road, which formed in the wake of the party building mania, also survived. Symptomatic of the difficulty in forming a single revolutionary group, Liberation Road was originally called Freedom Road Socialist Organization (FRSO). However, there was a split, with both groups claiming the FRSO name. Eventually the group that had founded FRSO changed its name to Liberation Road. The other side of the split continues as FRSO. The central issue in the split was whether there was a crisis of socialism or not. Liberation Road said, ‘Of course there is!’ while the minority in what is now FRSO denied this.

Back to the heyday of the anti-revisionist movement -- there was another aspirant seeking leadership of “the masses” in the United States -- the old Communist Party (CPUSA). The party still existed, small, weak, infiltrated by the FBI and was ostracized and ignored by the new movement. Many of the aspiring revolutionaries wanted to go beyond the gradualism and revisionism of the CPUSA and join the vibrant anti-revisionists, led by China against the revisionists in Russia. Not having continuity in the US with the old pro-Soviet communist movement, the new forces had to learn the ropes for themselves. Because of the prestige of China, Vietnam and other leading countries, the anti-Revisionist groups tended to depend heavily on the political lines and policies of those parties. In fact, the NCM adopted Marxism-Leninism wholesale, with several of these “sandbox parties” vying for “the franchise” from China or Albania.

Let us hope that as movements rise again to challenge the rule by capital in this country, that the mistakes noted above are not repeated. The Left must unite to eventually mount a real challenge, or it will fall by the wayside.

We can’t know whether the anti-revisionist movement could have ever built a viable Marxist-Leninist party in the United States -- if the groups had put the movement as a whole ahead of their own organizational ambitions. It is certainly questionable that it could have.

**For the rest of this appendix**, I will focus on a few of the attempts during that time to apply dialectics in conducting revolutionary work in the US.

I was not directly involved with any of the following groups but I followed the party-building movement fairly closely. The Communist League, to which we turn, was one of the pre-party organizations that had a base in the region where I lived (San Francisco-Oakland).

### **The Communist League on Dialectics**

The Communist League became one of self-declared parties: the Communist Labor Party. Nelson Perry, the leader of CL, was an experienced communist from his years with the CPUSA and other left organizations. For the edification of the new movement, he wrote a piece in 1972 called the *Dialectics of the Development of the Communist League*.

<https://www.marxists.org/history/erol/nem-1/ccl-dialectics.htm>

Perry:

We see the Communist League as an integral part and the result of the class struggle of the international proletariat. That struggle did not start in 1968. Therefore, it is necessary for us to trace the historical roots of the Communist League. It is only in this manner that we can understand our content and avoid the fatal errors of the past.

To understand our past – and therefore to face the future with the confidence of revolutionaries, we must understand the dialectics of our growth – concretize dialectics – or as it is stated, as applied dialectics.

First of all, we are going to have to grasp the essentials of the dialectical method of Marx and Engels. In his famous statement on dialectics in the *Poverty of Philosophy*, Marx wrote:

Wherein does the movement of pure reason consist? In posing itself, opposing itself, composing itself, in formulating itself as thesis, antithesis, synthesis, or yet again, in affirming itself, negating itself and negating its negation.

In other words, Marx's dialectics, as Stalin writes:

Does not regard the process of development as a simple process of growth, where quantitative changes do not lead to qualitative changes, but as a development which passes from insignificant and imperceptible quantitative changes to open fundamental changes, to qualitative changes; a development in which the qualitative changes occur not gradually, but rapidly and abruptly, taking the form of a leap from one state to another; they occur not accidentally, but as the natural result of an accumulation of imperceptible and gradual quantitative changes. The dialectical method there holds that the process of development should be understood not as movements in a circle, but as an onward and upward movement, as a transition from an old qualitative state to a new qualitative state, as a development from the simple to the complex, from the lower to the higher.

We should search carefully and find out how and why the Marxist revolutionary movement posed itself, opposed itself and elevated itself as a composition to a higher level. Only in this manner can we understand the qualitative level and historical tasks of our Communist League.

[End Perry]

[Perry starts with imperialism as the opposite of free enterprise, goes on to talk about the Bolshevik revolution, the rise of "U.S.N.A." imperialism (CL's term for United States of America), the Socialist Labor Party, SLP vs. IWPA, the AFL, the Socialist Party, the IWW, the (original) Communist Labor Party (CLP), the CPUSA, and the formation of the Communist Political Association (Browderism). Perry then continues.]

At the 16th Convention of the CP.U.S.A. in 1954, it was obvious that the Party was fractured beyond repair, but the politicking inside the Party continued. The 17th convention in 1958, came out fully for revisionism.

JK: At that point, the Provisional Organizing Committee (POC) to reconstitute a genuine Marxist-Leninist Party was formed, with 400 members, including Perry. In 1968 the POC, with 42 members, declared itself the American Workers Communist Party. The AWCP expelled a small collective in California, which declared itself the California Communist League. Out of that complex assortment of political groups stretching back 80 or so years, dialectics had apparently worked itself out and given birth to Nelson Perry and the CCL.

Perry:

Thus we see, that the formation of the California Communist League and its growth into the Communist League is part of the inevitable growth of the revolution in the U.S.N.A. The C.L. has the advantage of inheriting all that is positive in the history of the Communist movement. It has the weapon of understanding the past and the reasons for the failure of the past. This does not mean that the League is destined to become the Bolshevik Party in the U.S.N.A. We can do it; the path is clear; the doors are opened to us. Our success is, to a great extent dependent on whether we can hook the League into the general world-wide revolutionary movement, or fall into the subjectivity of American Exceptionalism.

The objective conditions – the environment is highly favorable to us. The question is now whether we will be able to supply history with the subjective factors that will allow for the outburst of a real movement in this country.

JK: This was only a few years before Perry and the CL believed they had sufficient subjective and objective factors in their favor to declare themselves a party. Their declaration was not met with enthusiasm by the other forces in the NCM, which were getting their feet wet, studying, working, combining, looking forward to building a genuine Leninist party. And one group laid into Perry's "dialectics":

**Red Banner replies:** *The Dialectics of the Communist League: Double-Dealing, Intrigue and Conspiracy – An Attempt to Liquidate the American Communist Movement. On the "Dialectics" of the "Theoreticians" of the Communist League* (1974)

<https://www.marxists.org/history/erol/ncm-2/red-banner/part1.htm>

Red Banner:

Let us begin with the League's attempt to grasp "the essentials of the dialectical method of Marx and Engels." Where does the League look in Marx for their definition of dialectics? With the following "famous quote on dialectics" from the *Poverty of Philosophy* they begin their discussion on Dialectics:

Wherein does the movement of pure reason consist? In posing itself, opposing itself, composing itself: in formulating itself as thesis, antithesis, synthesis, or yet again in affirming itself, negating itself and negating its negation.

At this point given the phrase “pure reason” we found the League’s language and choice of quotes to be not only bizarre, but also rather revealing, given that Marx’s dialectics are inseparable from philosophical materialism as opposed to philosophical idealism.

In an effort to discover what in particular it was about the League’s language and choice of quotes that gave rise to these doubts, we turned to that great work by Karl Marx, *The Poverty of Philosophy*, from which the League has expropriated its definition of “Marxist” dialectics. We find that in fact Marx was not discussing his own dialectics, but those of the arch-idealist and metaphysician Hegel. Let us then quote at length the passage from which the League has stolen its fundamental characterization of “Marxist” dialectics:

. . . The economists’ material is the active, energetic life of man; M. Proudhon’s material is the dogmas of the economists. But the moment we cease to pursue the historical movement of production relations, of which the categories are but the theoretical expression, the moment we want to see in these categories no more than ideas, spontaneous thoughts, independent of real relations, we are forced to attribute the origin of these thoughts to the movement of pure reason. How does pure external, impersonal reason give rise to these thoughts? How does it proceed in order to produce them?

If we had M. Proudhon’s intrepidity on the matter of Hegelianism we should say: it is distinguished in itself from itself. What does this mean? Impersonal reason, having outside itself neither a base on which it can pose itself, nor an object to which it can oppose itself, nor a subject with which it can compose itself, is forced to turn head over heels in posing itself, opposing itself and composing itself. . .

Here we will stop for a moment in order to point out that this is the precise conception of dialectics and language which the Communist League holds from “Dialectics of the Development...” we quote again their own words:

We should search carefully and find out how and why the Marxist revolutionary movement posed itself, opposed itself and elevated itself as a composition to a higher level.

This is nothing other than the Hegelianism of Proudhon which was resoundingly defeated and ridiculed by Marx as “twaddle”, being put forward once again over 100 years later!

...This ever narrowing description of the history of the labor movement and associated social movements in the world and the U.S.A. is nothing more than an ever narrower intellectual biography of a small handful of individuals who came to call themselves the Communist League. As with all idealist historical writings, it is not the material objective conditions which determine the development of social consciousness, it is the inter-play of ideas in the heads of a handful of theoreticians. It is the “Idea” being worked out in history that is being described in this history of the development of the Communist League.

...The method of the CL “dialecticians” is to take any two groups or things and call one the thesis, the other the antithesis. Pose their unification as a synthesis. If they are not united battle to unite them. If the CL’s or their predecessors’ so-called Marxism-Leninism is not united with the working class, they battle to unite the two. But, where does this battle take place? Where is the material base for this subjugation of reality to ideas? We quote from “Dialectics of the Development of the Communist League”:

On the battlefield of the masses and in the struggle for liberal democracy, the Communists were outstanding.

It is ultimately the masses who are the cannon fodder in this great war between ideas. As with M. Proudhon, the CL scales the ladder of contradictions but falls over backwards once having arrived at the second rung by posing themselves as the antithesis to revisionism.

The only meaningful conclusion we can draw from all this claptrap is the following: Sincere but undeveloped cadres, fierce fighters in the struggle to dump the “trotskyist and nationalist orientation that had been imposed on them”, in merging with “a large grouping of mainly ex-SDS militants who were studying the thought of Mao Tsetung”, made a fatal error of using basically petty-bourgeois and bourgeois anarchists and agents in order to establish their “organizational base.” The world renowned fools who made up the membership of SDS [Students for a Democratic Society] were never taken seriously by any hardworking cadres anywhere. In testimony before government panels and in interviews to public broadcasting interviewers in New York, agent after agent revealed they had infiltrated SDS and had used the organization in order to portray Marxist groups as malcontents and anarchists, in some cases actually instigating and carrying out bombings at the behest of their superiors.

JK: Red Banner goes on to attack the Communist League about the idea that there is “no third force.” The Communist League had written:

From the stand point of dialectical materialism, can there be a third force in any entity? Marxism denies this possibility.  
Imperialism created its antithesis – the colonies.  
There is no possible third force from the standpoint of theory and philosophy.  
Thesis: Capitalist imperialism, antithesis: the proletariat and the toiling masses,  
synthesis: socialism. This is the motion of history.

JK: This is absurd. There are many forces and factors present in any given situation, which is acknowledged by all Marxists -- with the exception of the Communist League.

Another group, The Central Organization of US Marxist-Leninists (COUSML), joined the discussion with the most memorable title in the polemics of the NCM:

*Dialectics of the development of Nelson Perry’s Head. A Refutation of the Counter-Revolutionary Line of the So-called “Communist League (June 1974)*

<https://www.marxists.org/history/erol/ncm-2/perry-head.htm>

## **A second example of the application of dialectics: The Motor City Labor League**

The Motor City Labor League (MCLL) was an organization with ties to the Communist League and they tried their hand at applying dialectics as well. One of their campaigns was devoted to electing a comrade named Justin Ravitz to a judgeship and they summed up the results in *The Dialectics of the Ravitz Campaign* (1974).

<https://marxists.architexturez.net/history/erol/ncm-1a/ravitz-campaign.pdf>

MCLL:

The process of running a revolutionary candidate for the position of recorder's court judge embodies within itself a series of contradictions, which if analyzed correctly allow for dynamic growth and development of both cadre and mass form, but if analyzed incorrectly, lead to practice devoid of correct revolutionary long range affect.

The principle (sic) contradictions appear to be the following:

**FIRST CONTRADICTION:** the general issue of electoral politics and the role of revolutionaries within the electoral process.

An incorrect analysis of this contradiction leads to acceptance of the electoral process through the terms of those who define "the rules of the game," who control the game, and who define "win" or "lose". This means that if we accept their definitions we could "win" in their terms but "lose" by our revolutionary terms; or we could accept their definition of "loss" without perceiving what was a revolutionary victory. This means that we could begin to determine our strategy and tactics in terms of what was necessary to "win" by their terms which would involve merely playing the electoral game bigger and better than the other candidates. This means that even if we "won" we would have merely placed one revolutionary in a relatively limited position of power but not have begun the process of altering the institutional structures that a) placed him in power through votes based on concrete understanding in a progressive sense and b) established mass forms that would provide a constituency for Justin to wage struggles on the bench from a position of POWER and not adjust "legitimacy" (a CRITICAL difference).

What is the correct analysis of the electoral process? The correct analysis, it seems to me, consists of acknowledging the nature of the contradiction. In truth we are forced into an arena in which the masses of people DO accept "their" rules of the game, that the masses of people WILL interpret our activity in terms of "win" or "lose" in a traditional manner, and that the masses of people will bring to the electoral process an attitude of cynicism, despair, anger, and frustration conditioned by a history of their failure to be able to significantly alter the base and nature of power in their lives through the electoral process but within that statement of what we do NOT have is also the negation - what we DO have. We have all those things that we don't have. We have a set of rules that the masses of people implicitly mistrust, often reject and know our crooked. Given a serious set of alternative rules, such masses could potentially (and historically have done so) work with and identify new sets of rules.

**SECOND CONTRADICTION:** The issue we are running on.

Crime and “law and order” is an arena where, again, the definitions as well as the objective realities could easily force us into non-revolutionary positions (altho’ perhaps progressive and reformist). The issue cannot be separated from the electoral arena.

THIRD CONTRADICTION: Justin isn't going to be able to do a whole lot himself.

FOURTH CONTRADICTION: The concrete functions of racism.

Despite the fact that most Americans are socialized into intellectual acceptance of a Bill of Rights, and “equality,” it is also true that most white Americans also deny those rights and that equality to large segments of “other” parts of the population.”

JK: The upshot of this work was unfortunate:

*The Political Line of the Motor City Labor League (ML) (1974)*

<https://www.marxists.org/history/erol/ncm-2/mccl-1/intro.htm>

But in June of 1971 we attempt to change our form to one of democratic centralism -- even though we had only a bare bones understanding of the concept. Under ill-formed principles of democratic centralism, we attempted to again start Marxist-Leninist educationals. However our main work was mass work. A partial list indicates the scope of our activities... 5) we initiated and won an electoral campaign for one of our cadre, Justin C. Ravitz, who at the time styled himself a Marxist.

[They allude to six other campaigns and mention a split that occurred in September of 1972.]

MCLL:

Judge Ravitz’s recent actions in the Mack trial are illustrative. When the defense team attempted to raise questions around safety in the plant, Judge Ravitz simply ruled “irrelevant” to the trial, essentially eliminating any political content concerning the justification of the strike. In addition, he ridiculed in his decision the “fly-by-night, infantile, PhD., left-wing phrase-mongers.” The net effect of his actions was to unite with the CPUSA and the bourgeois press in saying that the cause of the strike was left-adventurism, instead of the objective conditions in the Mack Plant. It is one thing to carry out a political polemic against the Progressive Labor Party and Worker’s Action Movement for opportunistically using the strike to promote their organizational goals, and quite another to pretend that the workers were not justly angry and therefore refused to work when the shutdown started. In effect, Judge Ravitz covered himself with Marxist phrases, and blew the line of a common liberal. Lenin spoke to this kind of insidious opportunism in *The Proletarian Revolution and the Renegade Kautsky*.

**A third example: The Guardian newspaper study group**

*Grasping Revolutionary Theory: A Guide for Marxist-Leninist Study Groups - A Guardian pamphlet by Irwin Silber*

<https://www.marxists.org/history/erol/ncm-4/silber-study-groups.pdf>



The Guardian, based in New York, City, was the one paper that everyone in the NCM read to find out what was going on in party building—e.g. forums and publications by the NCM groups. The paper had a major presence in the movement and later formed the Guardian Clubs to take part in the party building process.

The Guardian examined the principal contradiction in a concrete case – a study group.

Guardian Pamphlet:

In a recent study group discussion on contradictions, the question of what was the principal contradiction within the study group itself came up. It was decided to pursue this question as a practical exercise in the methodology of Marxism. As indicated in the last column in this series, such an exercise might prove fruitful for other groups.

Among the possible principal contradictions put forward by various study group members were the following:

1. Since the group was only a study group and not a Marxist-Leninist collective, the principal contradiction was between theory and practice or more particularly the absence of any collective practice against which collective study could be measured.
2. Between the study group leader and the other members of the group.
3. Between the men and women in the study group.

There was general agreement that all of these were contradictions. The problem was in determining which – if any – of these was the principal contradiction. After a while, the second and third contradictions were eliminated. This left the first point and – if this had only been merely an extra academic exercise – the discussion could have entered there.

But having also read Mao's "On Practice," some study group members pointed out that they certainly would not be practicing Marxism-Leninism if they merely located the principal contradiction but did nothing to try to resolve it.

Marxist philosophy holds that the most important problem does not lie in understanding the laws of the objective world and thus being able to explain it, but in applying the knowledge of these laws actively to change the world. From the Marxist viewpoint, theory is important...but Marxism emphasizes the importance of theory precisely and only because it can guide action. If we have a correct theory but merely prate about it, pigeonhole it and do not put it into practice, then that theory, however good, is of no significance. (*On Practice*).

There then ensued a lively discussion. How could the contradiction between collective study and individual practice be resolved? Some said that it could be dealt with (if not resolved) by group members using examples from their practice in the elaboration of different theoretical concepts; even to the point of the group undertaking to possibly offer some guidance to different members as they reported on their activities.

At first, it seemed like an “ideal” solution. Actually, as further discussion revealed it was really an “idealist” solution. Why? First because the study group had not developed sufficient common political criteria so that its “guidance” would be based on a developed political line. Its basic point of unity was an interest in and willingness to study Marxism-Leninism.

Secondly, the group would be totally dependent on the practice—and interpretation of that practice—by just one person. They would then put themselves in the position of pontificating an “analysis” of a situation without any first-hand knowledge of the situation, without a common political (rather than ideological) perspective and solely on the basis of a report from one individual about whom there was insufficient knowledge enabling them to take appropriate biases and subjective interpretations into account.

Well, if this was not the answer, then shouldn’t the group undertake to transform itself into a political collective, with study as one of its main aspects? As was pointed out, some Marxist-Leninist groups had actually developed in precisely such a way.

It did not take long, however, to realize that the concrete conditions of this particular study group were such that the group was not prepared to take such a step. The group had come together to study Marxism-Leninism, but from a variety of backgrounds. With one or two exceptions, most people in the group had not yet fully resolved for themselves their acceptance of certain fundamental Marxist-Leninist propositions. In fact, this is what they had come to learn.

Well, this wasn’t getting them any closer to resolving the principal contradiction. “It looks like we’ll just have to dissolve the study group,” said one disconsolate member. A chorus of “noes” greeted this statement, but there also seemed to be an inexorable logic to it as well and some people began to mutter direfully about the idiot who had proposed the exercise in the first place.

At this point someone made the bold suggestion that maybe the group ought to go back and rethink whether or not it had correctly identified the principal contradiction.

It was then that the discussion really began to come alive. It did not take the group long to realize that they had gone about “solving” the problem of principal contradiction in a dogmatic fashion. They had heard or read somewhere that the contradiction between theory and practice was one of the most fundamental—and each had encountered dire examples of dogmatism so often—that they had simply concluded that this must be the principal contradiction in this particular study group without taking into account the concrete conditions and circumstances of the group. In fact, they had started in an idealist fashion by not examining the actual practice of the study group, analyzing its accomplishments and shortcomings, studying the problems that actually came up—and then putting it all in a larger context.

Not only did this apply to the “principal contradiction” they had decided upon. It was also reflected in the other “candidates” for principal contradiction that had been proposed. Some people had previously had “bad” experiences (or what they considered to be “bad”) with bureaucratic or authoritarian leadership in different organizations and tended to look for this contradiction in every

situation—even though in this particular study group the relationship between study group leader and the rest of the people had generally been a good one.

Similarly, some people who rightly saw the struggle against male supremacy as one of the key tasks of the communist movement started with the assumption that the contradiction between men and women (concededly a nonantagonistic contradiction) was bound to be high on the list in this study group—although actual practice had not demonstrated that within this particular group it had evidenced itself as such.

Finally the discussion turned to the actual practice of the study group. “When you come to think of it,” said one person, “we actually spend practically all of our time trying to solve a contradiction that no one has mentioned before.”

“What is that?” asked someone else.

“The contradiction between Marxism-Leninism and us.”

“But that’s not a contradiction,” said someone else. “After all, we’re here to study and learn Marxism-Leninism.”

“True,” said the first one. “That’s the way we are trying to resolve the contradiction.”

“Then the way we should put it,” said still another, “is the contradiction between Marxism-Leninism and our lack of knowledge about it.”

“The contradiction between Marxism-Leninism and us.”

“Or if we want to generalize,” interpolated yet another, “between knowledge and ignorance.”

Some people liked that, but others thought that it had gone too far.

“After all, our problem is not ignorance—or knowledge—in general. It is ignorance of Marxism-Leninism. If we don’t make it specific, then we could try to resolve the principal contradiction by studying anything—not just Marxism-Leninism.”

And all of a sudden there was nothing left to debate. Everything had fallen into place. All of Mao’s discussion of principal and secondary contradiction, principal aspect of a contradiction and the unity of opposites in contradictions took on a concrete reality. The “principal aspect” of the principal contradiction in the study group clearly had been “lack of knowledge of Marxism” at the outset. Most people thought it still was, but they could see that the process of change was underway. They also could see how through struggle “lack of knowledge” was going to be turned into its opposite—“knowledge of Marxism-Leninism.”

There was still a final word to be put on the discussion. “Let’s just remember, comrades,” said the study group leader.

“We have found the principal contradiction for this particular study group, at this particular time, at this particular stage of its development. That’s very important. It enables us to proceed in a good way. Undoubtedly this corresponds to the actual situation of many other study groups as well. But the other contradictions that were mentioned—and some that weren’t—could also become the principal contradiction at a certain stage. This could happen as a result of our internal development or because events outside our study group might change the general circumstances that brought us together in the first place. We must always be prepared to review the actual circumstances of the group and reopen the discussion.”

JK: I wonder how that “principal contradiction” was resolved. If the PC was between “Marxism-Leninism” and “lack of knowledge of Marxism-Leninism,” how could the study group resolve it without engaging in practice? How could the PC be resolved through study alone, since Marxism-Leninism is not a “philosophy” per se. It is a combination of theory and practice, with practice generally being dominant. Or another way to put it: all theoretical questions must be resolved by practice.

Perhaps they thought that their study, learning more about M-L, was a “theoretical practice”, an idea which Louis Althusser made much of. Since the study group was after all only a study group, there was no practice to apply; unless you say it was “the theoretical practice” of study – that study is a theoretical practice.

Since a leading Marxist-Leninist like Mao held that contradictions exist throughout nature, society and human thought, one would think that there could be a principal contradiction in a study group. However, Mao also said that you can’t just name any two facets of a situation and say they constitute the PC. The facets or contradictions have to be real factors that pose themselves in opposition, or are drawn out to do so. As we have seen elsewhere in this Sourcebook, Mao said that the CCP should allow such oppositions to manifest, since they will be latent.

Was there in fact any such contradiction in this study group? If there had been, such as between the group and the leader or between the women and the men (as had been suggested and then rejected by the group), then presumably the group members would agree that one of those could be the PC in the study group. Nothing idealist about that. That didn’t happen though and one wonders if perhaps there was no principal contradiction in the study group – that a genuine contradiction had not emerged?

When there is a meeting of any kind -- a Congress, a Conference, a work meeting -- is there always a principal contradiction at the start of the event? Or does one emerge during the event, and perhaps one never does? Food for thought.

#### **Other sources:**

**Communist Federation of Britain (Marxist-Leninist), *The Principal Contradiction in the Organization* (1977)**

<https://www.marxists.org/history/erol/uk.secondwave/principal-contradiction.pdf>

1 The principal contradiction is between the outlook of the proletariat and the outlook of the bourgeoisie. The second contradiction is between workers and intellectuals.

2 Intellectuals are numerous in the organization and it is ripe for bourgeois errors. They are a privileged sector.

3 It is a non-antagonistic contradiction.

4 Intellectuals are often subjective and individualistic. Intellectuals should go into working class jobs.

JK: They come to this conclusion but offer no specifics of how these contradictions manifested in the organization.

**Seize the Time** on the principal contradiction (1977)

<https://www.marxists.org/history/erol/ncm-1a/seize.htm>

**Communist Orientation (Denmark)** on the principal contradiction (1975)

<https://www.marxists.org/history/erol/denmark/cwc-contradiction.pdf>

**The U.S. League of Revolutionary Struggle (Marxist-Leninist) (LRS)** weighed in.

Congress Papers #4, *An Essay on Dialectics - A "Revolutionary" Proposal Without a Revolutionary Theory*

<https://www.marxists.org/history/erol/ncm-7/lrs-last-congress-4/lrs-4-10.htm>

former LRS members:

The Secretariat has given to the organization a proposal that fails to deal with Marxism-Leninism as a theory in any serious way. Neither does it advance any alternative perspective in any way that can be dignified with the term "theory".

As a result the proposal falls time and again into basic errors as regards the history of socialism, the history of the League of Revolutionary Struggle, the current situation and the tasks of the organization. The proposal is in fact antithetical to Marxism-Leninism and will result not in some "distance" from M-L but in outright opposition to it. Adoption will bring the loss of the organization's revolutionary character and the abandonment of the struggle for the oppressed.

"Theoretically," the Secretariat claims, "we have already adopted the view that changes in the U.S. will have to come about through a majority revolution. Socialism will be possible only if the majority of the people supports it, including through some form of verifiable electoral means." (Secretariat of the LRS, *Proposal for Congress*, May 1990)

The center advances a lot of reasons for its desire to abandon M-L. "We certainly do not agree with most of the practice carried out in Lenin's name in the years since his death in the Soviet Union or Eastern Europe which have demonstrably proven to be bankrupt in the past few years... We believe in a majority revolution... We need an organization where people can openly proclaim their affiliation and still pursue elected political and union office or any other profession... A critical point which we have summarized at this time is that it is not possible for the working class to lead the overall united front at this time..." (*Proposal for Congress*)

At the May district conference in New York the former leading comrade of the organization also said that we should "move away" from M-L because, "We do not want to be the only people in

the world to be real M-L's", and also that, "Some things have taken place in that framework that are so horrible that we just cannot be associated with them."

Leaving apart the vagueness, the abstraction, the unscientific character of these assertions, and granting for the sake of discussion the accuracy of the many factual assumptions – which is to grant a very great deal indeed – it remains that there is not a scrap of bearing on the question of the theoretical correctness of Marxism-Leninism in any of this.

The role of the class struggle in history, the state, the necessity and character of the dictatorship of the proletariat, the struggle against revisionism, the decay of imperialism: none of these basic questions of Marxism is discussed in any meaningful way whatever. The discussion offered is shallow and one-sided, in a word, eclectic.

It is Marxism-Leninism, and M-L alone, which has served as the basis of the organization's remarkable achievements over the years. The dedication of comrades, the discipline, the principled relations, the sense of higher purpose that comes with Marxism-Leninism, have set the League apart. Now we are asked to do the most extraordinary thing: to take this unrivaled and truthful theoretical framework, which we have done so much to develop and to apply – and to abandon it on the basis of a complete theoretical vacuity!

#### On the History of the Anti-Revisionist Communist Movement

The problems faced by the LRS are scarcely unique among communist parties and organizations around the world today. The Secretariat proposal represents something objective that is happening worldwide in the class struggle, in the development of the capitalist/imperialist system on the one hand and in the development of socialism on the other. The proposal represents the negative, deteriorative aspect of development.

Some historical recollection is needed in order to see how our organization came to this condition.

At the May meeting in New York the former leading comrade spoke of the anti-revisionist communist movement of the 1970's as if the League had not been part of it. She said that the organization "engaged in incredible amounts of struggle with the rest of the left and in the world." She said that the "so-called 'anti-revisionist movement' attacked us", and that "eclecticism is how we formed". She also claimed that the organization had "an eclectic point of view through the 80's".

Nothing could be farther from the truth.

The League was formed in 1976 by the merger of the August Twenty-ninth Movement (ATM), which was based mainly in the Chicano movement, and I Wor Kuen (IWK), which was based in the Asian-nationality movements. Later the Revolutionary Communist League (RCL), based in the African-American struggle, also merged with the League.

#### Factors in the Political Deterioration of the Center

The extent of the collapse of the Center of the organization is such as truly to give one pause. There are a number of distinct factors each of which seems to have played a major part. Undoubtedly one major contributing factor has been the organization's very success. The continued ability of the LRS to wage struggle in the backward period of the 80's and its many significant practical achievements were genuinely remarkable. The Watsonville struggle, the part played by the organization in the Jackson campaign and in many local elections, and the steady growth of the membership throughout the Reagan years, were striking testimony to the correctness of its line. But within this progress there was also the seed of regress.

The general tenor of the Proposal is concern with the impact that the renunciation of M-L would have on the careers of individuals, and petty-bourgeois persons at that: the characterization of M-L discipline as something based upon "an ultraleft sense of egalitarianism", the aforementioned "need for an organization where people can openly proclaim their affiliation and still pursue elected political and union office or any other profession", and so forth. It is impossible not to see the temptations of practical success, electoral and otherwise, in this.

...The attitude of the Secretariat toward socialism in its proposal and its presentations comes down to very little more than to blame socialism because it must exist in the real world with all of its concreteness, difficulties, and contradictions. The only positive thing that the Proposal can find to say about communism is a howling blunder: "That is not to say that many of us do not believe in 'communism'. By communism we believe in the utopian ideal which Marx speaks of..." (*Proposal for Congress*, p. 3)

The very first thing that any Marxist should know about Marx is that the great achievement of his life is that he, above all others, raised socialism from the domain of utopianism to that of science. To fob Marx off, even unwittingly, as some sort of Utopian socialist is to make an implicit confession of one's complete disinterest in Marxism, and, for that matter, in socialism as any kind of a real proposition.

...In a time as turbulent as the present, even a party as experienced as the Communist Party of China, which continues to follow a generally correct line, has drifted into some serious problems in its relationship with the masses.

All over the world, things are in a confused, contradictory, mixed-up-in-the-middle-of-development stage. Imperialism continues to decay but it has still not been finished off. The development of socialism as a world system has still not reached a decisive stage of superiority. The problems of the two social systems are in no way comparable, however. The problems within socialism have to do with the failure of the program and political line of opportunism. These problems are completely solvable. The problems of imperialism are fundamental problems of the system itself and they can be solved only by its overthrow and elimination from history.

Our comrades of the Secretariat have likewise lost their heads. Perhaps this is not so surprising. Everyone else in the world has fallen into confusion; why should the Secretariat be different? They can see no virtue in it. They prefer to tumble head-over-heels in the ebb and surge of the tide, since that is what everyone else does.

But it is the unique quality of communists to keep their heads, to maintain the objective, the scientific, the revolutionary, historically conscious view. We are in the midst of an ebb in the course of revolution. This is unavoidable but transitory. The moment may seem difficult but there will come a turning. In the depth of the ebb is foretold the power of the gathering wave.

A. H. 6/90

JK: Shortly afterwards the LRS dissolved. The members who still considered themselves Marxist-Leninist took the name SON (Socialist Organizing Network) and some of them later merged with Freedom Road Socialist Organization.

Despite the title, the piece is not explicitly about dialectics. This is an example of many articles on the Left (worldwide) which refer to “the dialectics” of a situation without ever saying explicitly just what the dialectics consists of. This is an observation, not a criticism, although it would have been useful if more attention were paid to concretely explaining examples of dialectics in action.

**Communist Workers Party, *Study Marxist Philosophy***

<https://www.marxists.org/history/erol/ncm-5/cwp-essence.htm>

JK: On appearance and essence. E.g. Laid off workers are the appearance. The essence is that monopoly capitalists make the profit. A real image directly expresses the essence but it is not the essence itself (they say). A false image is said to be a distorted expression of the essence. Example of a thief is given. Penetrating the appearance to see the essence one must go through a process. The article attempts to use dialectics in explaining phenomena.

Of note, present-day theoretical physicist and well-known author Michio Kaku is listed in publications of the Workers Viewpoint Organization. One wonders if Michio Kaku has, like quantum physicists mentioned elsewhere in the Sourcebook, utilized in his scientific work any of the M-L concepts he espoused in his youth.

**Marxist-Leninist Education Project Theory of Knowledge Group, *Dialectical or mechanical materialism (A Response)* (1980)**

<https://www.marxists.org/history/erol/ncm-6/lom-reply-newlin.htm>

MLEP:

Clay Newlin, in his article *Idealism and Rectification* attempts to show that the MLEP clarification to the *On Practice* study guide exposes the idealism “inherent” in the rectification line. His main argument is that MLEP downplays the role of perception in the theory of knowledge in order to philosophically justify “liquidating the criterion of practice in the party-building period,” and thus “reduces party-building to a thought process – one that needs neither immediate perception nor immediate practice.”

JK: MLEP does not use the term “principal contradiction” in the article, but they do talk about the “principal task.”

MLEP:

Mao oversimplifies the Marxist theory of knowledge by distinguishing only between two stages; a lower stage of perceptual knowledge in which there is no concept formation and we only see “the phenomenal side, the separate aspects, and the external relations of things”; and a higher stage



of conceptual knowledge where man “uses concepts in the brain to form judgments and inferences” that enable him to “reach the totality, the essence, and the internal relations of things.” Whether this oversimplification is due to problems in popularization or translation, to talk of scientific knowledge at the time it was written, or to actual misunderstanding by Mao (MLEP continues to use *On Practice* as the most succinct statement of the relation between theory and practice available to us), we feel that the relation between higher and lower knowledge must be drawn out more fully than is done in Mao’s text to avoid misunderstanding.

JK: I asked Gemini about this issue. It supports MLEP’s concern.

Gemini: There are actually two main schools of thought on stages of knowledge:

- **Four Stages of Competence:** This model, popular in learning and training, focuses on the psychological journey of acquiring a skill. It has four stages:
  - Unconscious Incompetence (Ignorance): You don't know what you don't know.
  - Conscious Incompetence (Awareness): You realize you lack the skill.
  - Conscious Competence (Learning): You actively learn and practice the skill.
  - Unconscious Competence (Mastery): You perform the skill effortlessly.
- **Eight Stages of Knowledge:** This approach is more specific to scientific or technical knowledge. It outlines eight steps researchers go through, from complete ignorance to building a model that predicts outcomes. Stages include:
  - Complete Ignorance
  - Learn to Measure Key Variables
  - Control the Mean
  - Process Characterization
  - Know Why

### **Mao's Two Stages**

There's also the concept you mentioned, attributed to Mao Zedong. Mao's view is simpler, proposing two knowledge stages:

\* Perceptual Knowledge: Gained through direct experience with the senses.

\* Conceptual Knowledge: Gained through reflection and analysis of experience.

### **Criticisms of Mao's Model**

Mao's two-stage model has been criticized for being overly simplistic. It doesn't account for the complexities of knowledge acquisition, such as:

- The role of prior knowledge in shaping new understanding.
- The importance of social interaction and dialogue in learning.
- The ongoing process of refining and revising knowledge based on new information.

While it offers a basic framework, it doesn't capture the nuances of how we gain and develop knowledge.

## Appendix 4 The National Joint Study

Many individuals and small groups participated in the New Communist Movement starting in the early 1970's. I took part in several study groups in the Bay Area and later joined with other individuals to form small groups which did intensive study, political work in our workplaces, and organized in support of international struggles such as in Central America (El Salvador) and Eritrea.

One issue that generated controversy was "Left" and right errors. What were they and what was the main danger in the party-building movement? Some claimed "Left" errors were dominant while others said Right errors were. I did some study on the topic and in 1976 anonymously published a pamphlet, *What are "Left" and Right Errors?* to contribute to this discussion.

The full text is available at <https://www.marxists.org/history/erol/ncm-8/left-right.pdf>  
[Extracts, with clarifying additions about the names and initials]

A small but vital anti-revisionist communist movement is rapidly developing in the U.S. today. This movement consists of members of party-like organizations, of communist collectives, and of individuals not affiliated with any group. The movement still has several important theoretical and practical tasks to accomplish before the formation of a genuine communist party, but there has been considerable progress towards this goal over the last three years -- in theoretical study and struggle, in cooperation among communists of different nationalities, in beginning to link up with the working class, and in establishing organizations functioning under democratic centralism.

The movement as a whole and the party-like organizations in particular have arisen in response to the failures of earlier organizations like the Provisional Organizing Committee (POC) and the Progressive Labor Party (PLP) to break with revisionism, specifically the revisionism of the so-called Communist Party U.S.A. (CPUSA). Some of the successors to PL have also fallen by the wayside, such as Venceremos (which collapsed), the Communist League (CL - now called the Communist Labor Party-U.S.N.A.), and the Revolutionary Union (RU - now calling itself the Revolutionary Communist Party).

The political lines that CL and RU have put forward are not based on concrete analyses of concrete conditions or on a real understanding of Marxism-Leninism. Accordingly, the new communist movement has exposed and isolated both groups.

In addition to CL and RU, there are other groups which consider themselves to be in the anti-revisionist Marxist-Leninist camp -- groups like Workers Viewpoint and the New Voice. But these groups also are consolidated or consolidating around mistaken lines and around approaches which are not Marxist-Leninist. For example, WV's scholastic, sectarian, idealist approach towards combatting revisionism and the New Voice's line on the Black national question, which liquidates the national factor.

The errors and failures of these groups testify to the great difficulty of building a genuine anti-revisionist party in the U.S and not only in the U.S. In Portugal and other countries we find half a dozen or more organizations claiming to be the genuine upholders of Marxism-Leninism.

One main source of the ideological confusion is the existence of revisionism in the first socialist state, the U.S.S.R. and in revisionist parties (including the CPUSA) throughout the world.

This has brought about a situation of great ideological complexity as all shades of opportunism -- from social-democrats, Trotskyists, and revisionist "communists" to anarchists and terrorists -- use socialist and communist ideas and phrases to mask their reformist or adventurist counter-revolutionary deeds.

A second source of our ideological difficulty is that we are trying to build an anti-revisionist party in one of the main home bases of the capitalist class and bourgeois ideology. And we are trying to do this among a people known historically for our energy, idealism, practicality, efficiency, and organization, but also known for our lack of interest in theoretical matters, a grave weakness under today's conditions and one which must be overcome if we are to seriously threaten bourgeois rule in the U.S.

The groups which have been trying to overcome these difficulties; that is, the main organized forces in the new Communist movement, have included the October League (OL), I Wor Kuen (IWK), the August Twenty-Ninth Movement (ATM), the Guardian newspaper, the Philadelphia Workers Organizing Committee (PWOC), Puerto Rican Revolutionary Workers Organization (PRRWO), Congress of Afrikan People (CAP), Revolutionary Workers League (RWL), Bay Area Communist Union (BACU), Workers Congress (WC), Revolutionary Workers Congress (RWC), Marxist-Leninist Organizing Committee (MLOC), and the Revolutionary Bloc -- these last four growing out of the recently dissolved Black Workers Congress. There are also strong Marxist-Leninist tendencies within other organizations such as the African Liberation Support Committee (ALSC), Prairie Fire Organizing Committee (PFOC), and the Revolutionary Communist Party (RCP). And then there are the many study groups and communist collectives which also make up the movement. For example, the Communist Workers Group (CWG), which has written one of the most incisive, accurate, and detailed polemics to appear in our movement: "Our Tasks on the National Question."

The above forces are far from unified. In fact they are quite divided on many major questions of political line, including the way to build a new party. The October League, for example, has decided to follow in RU's footsteps and found "its own" communist party -- in 1976 -- based on its own skimpy analyses of conditions in the U.S. Other forces in the movement have given indications or also wanting to build parties.

But no genuine Marxist-Leninist party can be built until the major ideological and political questions facing the movement are further resolved. We need concrete analyses of the class structure that has developed under U.S. monopoly capital, the nature or the oppression of minorities within the U.S. (the national question), the basis of the oppression of women, the international situation, the trade union question, etc. Further, we need to formulate our program and tactics -- our perspective and how we are going to attack work in each of these areas. And we need a plan to move from our present state to the formation of a Marxist-Leninist party.

Until recently the overwhelming tendency has been for communist groups to put out newspapers and to neglect our theoretical tasks: that is, to sum up practice, make an analysis of conditions, and make these summations generally available. This "tide" of journalism is still very strong.

Only a few forces have fought it: IWK, which publishes a theoretical journal; the polemic "Our Tasks on the National Question"; the pamphlet "Class Analysis—U.S. in the 1970's" and some of the publications of PRRWO and ATM. Martin Nicolaus also made a contribution with his series on the restoration of capitalism in the USSR.

Yet in spite of the general absence of concrete analyses on major questions, there has been no lack of polemics among the groups, with accusations of dogmatism, Right opportunism, sectarianism, and economism being frequently hurled. In many cases the charges are accurate and provable, as the superrevolutionary dogmatism of CL's line on the Black national question, RU's organizational sectarianism in the National Interim Committee and elsewhere, and RU's and OL's economist tendencies in trade union work.

Indeed, there has been no shortage or blunders, of gross misapplications of Marxist-Leninist principles in the would-be anti-revisionist movement. We have only to think of PL's "All nationalism is reactionary" of a few years back, CL's "wooden" pseudo-Hegelian dialectics, RU's "nation of a new type," Third Period and WV's "anti-revisionist premises." The sharp polemics which have attacked these deviations have indicated the rising level of theoretical understanding in the movement.

But with all the charges made there has been a tacit assumption that "everybody" knows what ultra-"left" and Rightist errors are. It seems that many of us independents relatively new to the communist movement -- and many inside the larger groups as well -- have been stumbling around trying to sort out "dogmatists" from "Right opportunists" without really having studied that much about the history and nature of Right and "Left" errors. Only the Black Workers Congress has printed anything outright on the theoretical bases of the two main kinds of errors.

That was in the second issue of *The Communist*, where they gave a "Definition of Terms," many of which dealt with the question. However, this list was very short, and even according to BWO cadre inadequate as written.

The group which has done the most to apply the idea of "Left" in form, Right in essence to the current situation is the October League, with their series on the RU in the Call. OL tries to show how that description fits RU's line, but they assume readers know how to differentiate mistakes that are "Left" in form from ones that are Right in form. This assumption doesn't fit the facts.

The other publication dealing with "Left" in form, Right in essence was Carl Davidson's series on Trotsky for the Guardian. This series (now in pamphlet form) is very helpful in understanding Trotskyism, but it also takes knowledge of "Left" and Right errors for granted for the most part and is also somewhat diffuse and incomplete in its assessment of the "Left" and Right aspects of Trotskyism, despite its title ("Left in Form, Right in Essence: A Critique of Contemporary Trotskyism").

Other sections of the movement have generally not used the “Left” in form, Right in essence terminology. But it is not just a question of terminology. The phrase “Left” in form, Right in essence is used to refer to "Leftism," to ultra-left errors.

These are different expressions to describe the same phenomena. No mention of "Left" errors, study of "Left" errors has been made because the majority of groups have put forward the view that Rightism is the main danger in the world and in the U.S. communist movement as well. Thus we have heard a lot about fighting economism, Right opportunism, and revisionism (as if revisionism took only Rightist forms).

OL and the Guardian have argued that while Rightism is the main danger internationally, ultra-"leftism" is the main danger in the new Communist movement. OL has recently modified its position, pointing to what they believe is the rise of a centrist trend (referring to the Guardian) and others). Similarly, ATM and PRRWO have characterized RU (RCP) as Right deviationist, while OL and the Guardian have focused on RU's "Leftism."

But while applying these branding irons, none of these groups have written very much at all about telling the two kinds of errors apart. Nor have they devoted much effort to analyzing our concrete conditions to provide a standard by which to judge the deviations.

Our movement has a lot of practical experience behind it (acquired though before most of us became Marxist-oriented), but we are very weak theoretically for several historical reasons. Yet knowledge of theory and the development of correct theories about U.S. conditions are essential forerunners to the development of a correct political line. As the Chinese Communist Party, which has more than fifty years of experience, emphasizes: "the correctness or incorrectness of the ideological and political line decides everything." (Tenth National Congress of the Communist Party of China: Documents, p. 17). When the political line put forward is correct, the revolution advances; when it is incorrect, the revolution suffers setbacks. The Chinese people have learned this basic historical lesson paid for in blood, in the lives of millions of human beings.

[End Extracts]

JK: Reads as quite a mouthful 45 years later, doesn't it? Much to scrutinize, unpack and critique there. However, my focus in this Sourcebook is on dialectics and materialism rather than the history of the movement so I will not delve into this here.

### **Summary of Main Points**

Incorrect political lines may be "Left" in form, Right in essence; openly Rightist; or vacillate between the two. Adventurism, dogmatism, and sectarianism are associated with ultra-Leftism, and revisionism, reformism, and tailism with Rightism. Opportunism and subjectivism are associated with both.

Criteria for recognizing incorrect lines have to do with the analysis of concrete conditions, application of Marxist principles, slogans and other propaganda, the effect of the line in practice, and the class origin of those putting the line forward. Of these five criteria practice is foremost,

but the analysis of conditions and application of Marxist principles are also of critical importance. Slogans and class origin are also useful, but less reliable.

In analyzing conditions, "Left" deviations tend to overestimate the subjective forces or factors and underestimate the objective forces or factors. Right deviations tend to make the opposite mistakes.

There are exceptions to these generalizations, but on the whole "Left" errors can be recognized by:

1. In analyzing conditions: Skipping stages, claiming something has gone out of existence when it is still present to a significant degree. Overestimating the subjective factors, underestimating the objective factors.

2. In bringing dialectical and historical materialism to bear: In class analysis: belittling middle or third forces. Stressing book-learning, downplaying practice. Holding fast to supposedly eternal "book" truths of Marxism.

3. In slogans and other propaganda: Super-revolutionary rhetoric. Adventurist views and slogans.

In practice among the people: Pitting the working class against all other forces. Words and actions that try to leap ahead of where people are at. Neglect of alliances, treating friends as the enemy. Driving middle forces to the side of the enemy. Rapid isolation of communists.

Overall: "All struggle, no alliance"

Right errors can generally be recognized by:

1. In analyzing conditions: Failure to see that conditions have changed. Holding fast to an old, outdated analysis. Underestimating the subjective factors, overestimating the objective factors.

2. In bringing dialectical and historical materialism to bear: In class analysis: embracing the enemy and all middle forces. Stressing experience over theory. Revision of fundamental tenets of Marxism-Leninism. Deliberate or unconscious fuzziness of views.

3. In slogans and other propaganda: Non-struggle, vague slogans. "Liberal" rhetoric.

4. In practice among the people: Treating the bourgeoisie as being in the same camp as the working class. Tailing the spontaneous movement in words and actions. Loss of independence of communist forces, over-reliance on alliances, treating the enemy as friends. Allowing bourgeoisie uncontested control of middle forces. Slower isolation of communists.

Overall: "All alliance, no struggle."

Deviations come in basically two forms, ultra-"Left" and Right. Within everything there are opposites in struggle and unity, and "Leftists" and Rightists both err in their understanding of genuine struggle, the genuine unity based on struggle, and the overall relationship between

opposites in a process. They fail to draw distinctions properly and gravitate toward one pole or the other, mistaking allies for enemies or enemies for allies.

In revolutionary parties the class base of both "Left" and Right errors and of the vacillations between the two is usually the petty-bourgeoisie.

The correct line develops only through two-line struggle with erroneous views, "Left" and Right.

JK: The pamphlet was circulated and I received several letters providing feedback the pamphlet asked for. Several were positive, the most notable being from Amiri Baraka of CAP, while others raised criticisms.

Against the fluctuating background in which the larger national groups had siloed themselves off as parties, or were in the process of doing so, a dozen smaller groups decided to address our theoretical ignorance by undertaking a joint study. We struggled over points of unity and finally agreed on five of them. The result was the National Joint Study (NJS) of about a dozen groups, which took place in 1975. This was an intense and prolonged effort, with detailed questions to be studied and an agreement to write papers and share results from our study.

## **Outline of the National Joint Study**

### **Basics of dialectics:**

xMLC and A Green, *Report on Dialectics Section*. (January 1980)

<https://www.marxists.org/history/erol/nem-5/green-mao.pdf>

### **Points of unity:**

1. Basic Law of Dialectics. National study in context of CPC/PLA (China-Albania) differences. Points of unity to take part in study are listed separately.

POUs:

1. Uphold Marxism-Leninism, Marx, Engels, Lenin, Stalin.
2. Capitalism is restored in Soviet Union.
3. Contradictions among comrades to be resolved through struggle (Bolshevik Criticism and Self Criticism),
4. No genuine Marxist-Leninist party exists in the US nor a genuine center. Theory is principal now.
5. Participants agree to commit time, etc.

### **Mao's Understanding of Dialectics**

We reject Hoxha criticisms of Mao. Hoxha provides little evidence. We say Mao further developed dialectics in *On Contradiction*.

Hoxha: Dialectics goes in spirals but Mao talks of circles; whereas we cite Mao arguing against metaphysical views. However, Mao doesn't address either spirals or circles. Further, at the time we did not know Mao's debt to two Soviet philosophers whom Mao read closely and whose ideas appear in *On Contradiction* and *On Practice*.

Hoxha treats informal remarks by Mao about lunar calendar as if it were his serious dialectical discourse.

### **Mao's understanding of contradiction.**

We uphold it. We quote Mao on identity. On how the principal aspect of a contradiction and non-principal aspects transform themselves into each other. The nature of a thing is mainly determined by the principal aspect of the contradiction. More on Hoxha's criticisms. We do think a criticism of Mao's "when dogmatism is transformed into its opposite, it becomes either Marxism or revisionism" is warranted, but not Hoxha's criticism. A muddle of opposites by Mao on this particular. On the existence of many opposites. All opposites are not equal, we say. E.g. Mao's principal and secondary contradictions. Mao is inconsistent here. We hold dogmatism and empiricism are opposite, one-sided approaches.

### **Principles and Compromises**

Has received little attention in the New Communist Movement (NCM). NCM has displayed vacillation, lack of stable principles.

Some say "we never compromise on principles." We say that is wrong. PL, RU, WVO don't know what they are talking about.

Question 1. Brief answer. Lower principles must give way to higher ones. Lenin, Marx and Engels on "principles." Lenin principles as guide to action. We say "principles refer to ideas, consciousness, the subjective realm, while essence and laws refer to the material world, the objective realm."

Principles in re: theory, aims, tactics, etc. in Lenin. Lenin not entirely consistent. Lenin on putting some principles in the background at times. Again, at times we must compromise on principles – lesser ones in a given situation.

Compromises and principles in Lenin. Brest-Litovsk and NEP (New Economic Policy). Cite Lenin on examples of lesser importance. PLA says we should never compromise on principles. Left Wing communism book contains the most by Lenin on compromises. Lenin: "all dividing lines in nature and in society are mutable and to a certain extent conventional."

Question 2b. Mao's goes further than Lenin in description principle and flexibility as a unity of opposites. Mao on principles and flexibility. Everything in the world is a unity of opposites. Cites hydrogen and oxygen make water.

(JK: What about quarks? There are three of them in these hadrons, the most stable of which are protons and neutrons.)

We uphold usefulness of principles v. flexibility over principles v. compromise and state two reasons. All unity, all struggle types of errors. This is not combining two into one.

Examples of 'pure principle' approach. On the national struggle against Japan. Also does not recognize there is a principal contradiction (PC) which can differ from the fundamental contradiction (FC). Mao refers to "state capitalism" in China, as an essential part of the mix. This approach is closely bound with the idea of revolution by stages. Quote from Mao on major and minor principles in everything and must subordinate minor to major ones. Mao does say basic



principles of Marxism must never be violated. (JK: and what does Mao say those are?) Against Liu Shao-chi who said we don't compromise on principles, only on practical matters.

Section on Principal Contradiction. Did Marx, Engels, Lenin or Stalin use idea of principal contradiction? We say Mao's PC was not an original contribution but he contributed to development of the concept.

### **Further sources**

**The New Voice**, *What do left and right mean?*

<https://www.marxists.org/history/erol/ncm-3/nv-left-right.htm>

October League (OL) has been zigzagging. OL showing sectarianism but rightism in refusing to spread Marxism-Leninism.

**Pacific Collective**, *Characteristics of Left and Right Opportunism*

<https://www.marxists.org/history/erol/ncm-1a/pc-errors.pdf>

p 114 (from the appendix in their book). They cite Foto Cami's article, *Objective and Subjective Factors in the Revolution* (#1, 8, 1973). They cite PUL's 2,3 *Many Parties*.

116 Overview. They say they will not give concrete examples! But they list various topics and indicate Left and Right approach: Stages of the revolution, pace of the revolution, economic development, reforms, tactics, unity and struggle with allies, relation to the masses, etc.

132 Left and Right in theory and practice.

136 Notes to Appendix

**Newlin, Clay**, *PWOC'S Leftism – a self-criticism*

<https://www.marxists.org/history/erol/ncm-6/pwoc-self-crit.htm>

<https://www.marxists.org/history/erol/ncm-6/pwoc-pul-4.htm>

**Line of March** debate about ultraleftism and party building

<https://www.marxists.org/history/erol/ncm-7/lom-ultra-left.pdf>

**Former members of Committee for a Proletarian Party**, *In Defense of Mao Tsetung's Contributions to Materialist Dialectics*

<https://www.marxists.org/history/erol/ncm-5/cpp-mao/section-1.htm>

Reprinted in:

<https://reconstructioncommuniste.wordpress.com/2015/09/15/in-defense-of-mao-tsetungs-contributions-to-materialist-dialectics/>

and in: <https://tamilmarxism.blogspot.com/2018/08/dialectics-mao-and-hegel-differing.html>

**CPP**: Agree with Mao that basic law of dialectics is unity of opposites. Unity and identity. Mao on exchange of place (principal and non-principal aspects of a C). Example: proletariat and bourgeoisie. Not as sometimes stupidly interpreted – bourgeoisie does not become the proletariat. On Hoxha. Mechanists like Bukharin tend to negate the internal connection.

In *On Contradiction* Mao talks about internal and external causes. Contradiction is universal and absolute in reality, CPP says. Mechanism tends to equate all contradictions as antagonistic. Stalin often falls prey to mechanistic tendencies of Bukharin and Trotsky. Mao says Stalin didn't recognize the unity of opposites. More by CPP on Stalin's errors. Proletarian ideology exists by virtue of its conflict with bourgeois ideology. Cites Mao on many errors ("Hundred Flowers" campaign in Soviet Union. Hundred flowers was to 'incubate' people from bourgeois ideology.)

Party of Labor of Albania shares some of Stalin's errors. They share with Stalin "two combines into one", as do Chinese revisionists. Mao showed that antagonistic classes continue to exist under socialist conditions. PLA denies antagonistic classes exist in Albania. Bourgeois right continues to exist. Monolithic party an incorrect idea.

**Amilcar Cabral/Paul Robeson Collective (AC/PRC)** Notes from the MultiLateral conference (MULC) (Summer 1979). Extensive notes on the discussion at the MULC. But not specifically on dialectics.

<https://marxists.catbull.com/history/erol/nem-5/mulc-notes.pdf>

## Appendix 5 Noam Chomsky on Post-Modern Philosophers

JK: I have included nearly all of Chomsky's remarks on this subject, despite repetitions. The text voices my own feelings when I read many of these authors. Because of their obscurity, their detachment from actual progressive and revolutionary struggles, and the uselessness of their writings in making major social change, I exclude or say only a little about most of these philosophers.

Some have doubted Chomsky wrote this piece, claiming this is not in his style. Chomsky is said to have verified he wrote it -- but the link is dead. Whether he did or not, in this video Chomsky makes many of the same trenchant points the text does:

<https://www.youtube.com/watch?v=OjQA0e0UYzI&t=20s>

I first came across these remarks by Chomsky on Rosa Lichtenstein's site. (Her views are discussed at the end of Chapter 3.) The Chomsky text is from her site.

[http://anti-dialectics.co.uk/page%2009\\_02.htm#Chomskys-comments-on-POMO](http://anti-dialectics.co.uk/page%2009_02.htm#Chomskys-comments-on-POMO).

See also: <http://bactra.org/chomsky-on-postmodernism.html>

JK: However, the Venerable Chomsky also said the following -- which has to be mentioned in a book about dialectics.

Chomsky:

Dialectics is one that I've never understood, actually - I've just never understood what this word means. Marx doesn't use it, incidentally, it's used by Engels. And if anybody can tell me what it is, I'll be happy, I mean, I've read all kinds of things which talk about "dialectics" -- I haven't the foggiest idea what it is. It seems to mean something about complexity, or alternative positions, or change, or something. I don't know.

JK: To say that Marx does not use the term "dialectical" is either to betray striking ignorance, or, and much more likely, feigned ignorance.

### Chomsky's remarks on post-modern philosophers

I've returned from travel-speaking, where I spend most of my life, and found a collection of messages extending the discussion about 'theory' and 'philosophy,' a debate that I find rather curious. A few reactions -- though I concede, from the start, that I may simply not understand what is going on.

As far as I do think I understand it, the debate was initiated by the charge that I, Mike, and maybe others don't have 'theories' and therefore fail to give any explanation of why things are proceeding as they do. We must turn to 'theory' and 'philosophy' and 'theoretical constructs' and the like to remedy this deficiency in our efforts to understand and address what is happening in the world. I won't speak for Mike. My response so far has pretty much been to reiterate something I wrote 35 years ago, long before 'postmodernism' had erupted in the literary intellectual culture: 'if there is a body of theory, well tested and verified, that applies to the conduct of foreign affairs or the

resolution of domestic or international conflict, its existence has been kept a well-guarded secret,' despite much 'pseudo-scientific posturing.'

To my knowledge, the statement was accurate 35 years ago, and remains so; furthermore, it extends to the study of human affairs generally, and applies in spades to what has been produced since that time. What has changed in the interim, to my knowledge, is a huge explosion of self- and mutual-admiration among those who propound what they call 'theory' and 'philosophy,' but little that I can detect beyond pseudo-scientific posturing. That little is, as I wrote, sometimes quite interesting, but lacks consequences for the real world problems that occupy my time and energies.

...The proponents of 'theory' and 'philosophy' have a very easy task if they want to make their case. Simply make known to me what was and remains a 'secret' to me: I'll be happy to look. I've asked many times before, and still await an answer, which should be easy to provide: simply give some examples of 'a body of theory, well tested and verified, that applies to' the kinds of problems and issues that Mike, I, and many others (in fact, most of the world's population, I think, outside of narrow and remarkably self-contained intellectual circles) are or should be concerned with: the problems and issues we speak and write about, for example, and others like them. To put it differently, show that the principles of the 'theory' or 'philosophy' that we are told to study and apply lead by valid argument to conclusions that we and others had not already reached on other (and better) grounds; these 'others' include people lacking formal education, who typically seem to have no problem reaching these conclusions through mutual interactions that avoid the 'theoretical' obscurities entirely, or often on their own. Again, those are simple requests. I've made them before, and remain in my state of ignorance. I also draw certain conclusions from the fact.

As for the 'deconstruction' that is carried out (also mentioned in the debate), I can't comment, because most of it seems to me gibberish. But if this is just another sign of my incapacity to recognize profundities, the course to follow is clear: just restate the results to me in plain words that I can understand, and show why they are different from, or better than, what others had been doing long before and have continued to do since without three-syllable words, incoherent sentences, inflated rhetoric that (to me, at least) is largely meaningless, etc. That will cure my deficiencies -- of course, if they are curable; maybe they aren't, a possibility to which I'll return.

These are very easy requests to fulfil, if there is any basis to the claims put forth with such fervour and indignation. But instead of trying to provide an answer to this simple requests (sic), the response is cries of anger: to raise these questions shows 'elitism,' 'anti-intellectualism,' and other crimes -- though apparently it is not 'elitist' to stay within the self- and mutual-admiration societies of intellectuals who talk only to one another and (to my knowledge) don't enter into the kind of world in which I'd prefer to live. As for that world, I can reel off my speaking and writing schedule to illustrate what I mean, though I presume that most people in this discussion know, or can easily find out; and somehow I never find the 'theoreticians' there, nor do I go to their conferences and parties. In short, we seem to inhabit quite different worlds, and I find it hard to see why mine is 'elitist,' not theirs. The opposite seems to be transparently the case, though I won't amplify.

To add another facet, I am absolutely deluged with requests to speak and can't possibly accept a fraction of the invitations I'd like to, so I suggest other people. But oddly, I never suggest those who propound 'theories' and 'philosophy,' nor do I come across them, or for that matter rarely even

their names, in my own (fairly extensive) experience with popular and activist groups and organizations, general community, college, church, union, etc., audiences here and abroad, third world women, refugees, etc.; I can easily give examples. Why, I wonder. The whole debate, then, is an odd one. On one side, angry charges and denunciations, on the other, the request for some evidence and argument to support them, to which the response is more angry charges -- but, strikingly, no evidence or argument. Again, one is led to ask why.

It's entirely possible that I'm simply missing something, or that I just lack the intellectual capacity to understand the profundities that have been unearthed in the past 20 years or so by Paris intellectuals and their followers. I'm perfectly open-minded about it, and have been for years, when similar charges have been made -- but without any answer to my questions. Again, they are simple and should be easy to answer, if there is an answer: if I'm missing something, then show me what it is, in terms I can understand. Of course, if it's all beyond my comprehension, which is possible, then I'm just a lost cause, and will be compelled to keep to things I do seem to be able to understand, and keep to association with the kinds of people who also seem to be interested in them and seem to understand them (which I'm perfectly happy to do, having no interest, now or ever, in the sectors of the intellectual culture that engage in these things, but apparently little else).

Since no one has succeeded in showing me what I'm missing, we're left with the second option: I'm just incapable of understanding. I'm certainly willing to grant that it may be true, though I'm afraid I'll have to remain suspicious, for what seem good reasons. There are lots of things I don't understand -- say, the latest debates over whether neutrinos have mass or the way that Fermat's last theorem was (apparently) proven recently. But from 50 years in this game, I have learned two things: (1) I can ask friends who work in these areas to explain it to me at a level that I can understand, and they can do so, without particular difficulty; (2) if I'm interested, I can proceed to learn more so that I will come to understand it. Now [Derrida](#), [Lacan](#), [Lyotard](#), [Kristeva](#), etc. -- even [Foucault](#), whom I knew and liked, and who was somewhat different from the rest -- write things that I also don't understand, but (1) and (2) don't hold: no one who says they do understand can explain it to me and I haven't a clue as to how to proceed to overcome my failures. That leaves one of two possibilities: (a) some new advance in intellectual life has been made, perhaps some sudden genetic mutation, which has created a form of 'theory' that is beyond quantum theory, [topology](#), etc., in depth and profundity; or (b)...I won't spell it out.

Again, I've lived for 50 years in these worlds, have done a fair amount of work of my own in fields called 'philosophy' and 'science,' as well as intellectual history, and have a fair amount of personal acquaintance with the intellectual culture in the sciences, humanities, social sciences, and the arts. That has left me with my own conclusions about intellectual life, which I won't spell out. But for others, I would simply suggest that you ask those who tell you about the wonders of 'theory' and 'philosophy' to justify their claims -- to do what people in physics, math, biology, linguistics, and other fields are happy to do when someone asks them, seriously, what are the principles of their theories, on what evidence are they based, what do they explain that wasn't already obvious, etc. These are fair requests for anyone to make. If they can't be met, then I'd suggest recourse to [Hume's](#) advice in similar circumstances: [to the flames](#).

Specific comment. Phetland asked who I'm referring to when I speak of 'Paris school' and 'postmodernist cults': the above is a sample. He then asks, reasonably, why I am 'dismissive' of it.

Take, say, Derrida...one of the grand old men. I thought I ought to at least be able to understand his [Grammatology](#), so tried to read it. I could make out some of it, for example, the critical analysis of classical texts that I knew very well and had written about years before. I found the scholarship appalling, based on pathetic misreading; and the argument, such as it was, failed to come close to the kinds of standards I've been familiar with since virtually childhood. Well, maybe I missed something: could be, but suspicions remain, as noted. Again, sorry to make unsupported comments, but I was asked, and therefore am answering.

Some of the people in these cults (which is what they look like to me) I've met: Foucault (we even have a several-hour discussion, which is in print, and spent quite a few hours in very pleasant conversation, on real issues, and using language that was perfectly comprehensible -- he speaking French, me English); Lacan (who I met several times and considered an amusing and perfectly self-conscious charlatan, though his earlier work, pre-cult, was sensible and I've discussed it in print); Kristeva (who I met only briefly during the period when she was a fervent Maoist); and others. Many of them I haven't met, because I am very remote from these circles, by choice, preferring quite different and far broader ones -- the kinds where I give talks, have interviews, take part in activities, write dozens of long letters every week, etc. I've dipped into what they write out of curiosity, but not very far, for reasons already mentioned: what I find is extremely pretentious, but on examination, a lot of it is simply illiterate, based on extraordinary misreading of texts that I know well (sometimes, that I have written), argument that is appalling in its casual lack of elementary self-criticism, lots of statements that are trivial (though dressed up in complicated verbiage) or false; and a good deal of plain gibberish. When I proceed as I do in other areas where I do not understand, I run into the problems mentioned in connection with (1) and (2) above. So that's who I'm referring to, and why I don't proceed very far. I can list a lot more names if it's not obvious. For those interested in a literary depiction that reflects pretty much the same perceptions (but from the inside), I'd suggest [David Lodge](#). Pretty much on target, as far as I can judge.

Phetland also found it 'particularly puzzling' that I am so 'curtly dismissive' of these intellectual circles while I spend a lot of time 'exposing the posturing and obfuscation of the *New York Times*.' So 'why not give these guys the same treatment.' Fair question. There are also simple answers. What appears in the work I do address (NYT, journals of opinion, much of scholarship, etc.) is simply written in intelligible prose and has a great impact on the world, establishing the doctrinal framework within which thought and expression are supposed to be contained, and largely are, in successful doctrinal systems such as ours. That has a huge impact on what happens to suffering people throughout the world, the ones who concern me, as distinct from those who live in the world that Lodge depicts (accurately, I think). So this work should be dealt with seriously, at least if one cares about ordinary people and their problems. The work to which Phetland refers has none of these characteristics, as far as I'm aware. It certainly has none of the impact, since it is addressed only to other intellectuals in the same circles. Furthermore, there is no effort that I am aware of to make it intelligible to the great mass of the population (say, to the people I'm constantly speaking to, meeting with, and writing letters to, and have in mind when I write, and who seem to understand what I say without any particular difficulty, though they generally seem to have the same cognitive disability I do when facing the Postmodern cults). And I'm also aware of no effort to show how it applies to anything in the world in the sense I mentioned earlier: grounding conclusions that weren't already obvious. Since I don't happen to be much interested in the ways that intellectuals

inflate their reputations, gain privilege and prestige, and disengage themselves from actual participation in popular struggle, I don't spend any time on it.

Phetland suggests starting with Foucault -- who, as I've written repeatedly, is somewhat apart from the others, for two reasons: I find at least some of what he writes intelligible, though generally not very interesting; second, he was not personally disengaged and did not restrict himself to interactions with others within the same highly privileged elite circles. Phetland then does exactly what I requested: he gives some illustrations of why he thinks Foucault's work is important. That's exactly the right way to proceed, and I think it helps understand why I take such a 'dismissive' attitude towards all of this -- in fact, pay no attention to it.

What Phetland describes, accurately I'm sure, seems to me unimportant, because everyone always knew it -- apart from details of social and intellectual history, and about these, I'd suggest caution: some of these are areas I happen to have worked on fairly extensively myself, and I know that Foucault's scholarship is just not trustworthy here, so I don't trust it, without independent investigation, in areas that I don't know -- this comes up a bit in the discussion from 1972 that is in print. I think there is much better scholarship on the 17th and 18th century, and I keep to that, and my own research. But let's put aside the other historical work, and turn to the 'theoretical constructs' and the explanations: that there has been a great change from harsh mechanisms of repression to more subtle mechanisms by which people 'come to do' what the powerful want, even enthusiastically. That's true enough, in fact, utter truism. If that's a 'theory,' then all the criticisms of me are wrong: I have a 'theory' too, since I've been saying exactly that for years, and also giving the reasons and historical background, but without describing it as a theory (because it merits no such term), and without obfusatory rhetoric (because it's so simple-minded), and without claiming that it is new (because it's a truism). It's been fully recognized for a long time that as the power to control and coerce has declined, it's more necessary to resort to what practitioners in the PR industry early in this century -- who understood all of this well -- called 'controlling the public mind.' The reasons, as observed by Hume in the 18th century, are that 'the implicit submission with which men resign their own sentiments and passions to those of their rulers' relies ultimately on control of opinion and attitudes. Why these truisms should suddenly become 'a theory' or 'philosophy,' others will have to explain; Hume would have laughed.

Some of Foucault's particular examples (say, about 18th century techniques of punishment) look interesting, and worth investigating as to their accuracy. But the 'theory' is merely an extremely complex and inflated restatement of what many others have put very simply, and without any pretence that anything deep is involved. There's nothing in what Phetland describes that I haven't been writing about myself for 35 years, also giving plenty of documentation to show that it was always obvious, and indeed hardly departs from truism. What's interesting about these trivialities is not the principle, which is transparent, but the demonstration of how it works itself out in specific detail to cases that are important to people: like intervention and aggression, exploitation and terror, 'free market' scams, and so on. That I don't find in Foucault, though I find plenty of it by people who seem to be able to write sentences I can understand and who aren't placed in the intellectual firmament as 'theoreticians.'

To make myself clear, Phetland is doing exactly the right thing: presenting what he sees as 'important insights and theoretical constructs' that he finds in Foucault. My problem is that the

'insights' seem to me familiar and there are no 'theoretical constructs,' except in that simple and familiar ideas have been dressed up in complicated and pretentious rhetoric. Phetland asks whether I think this is 'wrong, useless, or posturing.' No. The historical parts look interesting sometimes, though they have to be treated with caution and independent verification is even more worth undertaking than it usually is. The parts that restate what has long been obvious and put in much simpler terms are not 'useless,' but indeed useful, which is why I and others have always made the very same points. As to 'posturing,' a lot of it is that, in my opinion, though I don't particularly blame Foucault for it: it's such a deeply rooted part of the corrupt intellectual culture of Paris that he fell into it pretty naturally, though to his credit, he distanced himself from it. As for the 'corruption' of this culture particularly since World War II, that's another topic, which I've discussed elsewhere and won't go into here. Frankly, I don't see why people in this forum should be much interested, just as I am not. There are more important things to do, in my opinion, than to inquire into the traits of elite intellectuals engaged in various careerist and other pursuits in their narrow and (to me, at least) pretty uninteresting circles. That's a broad brush, and I stress again that it is unfair to make such comments without proving them: but I've been asked, and have answered the only specific point that I find raised. When asked about my general opinion, I can only give it, or if something more specific is posed, address that. I'm not going to undertake an essay on topics that don't interest me. Unless someone can answer the simple questions that immediately arise in the mind of any reasonable person when claims about 'theory' and 'philosophy' are raised, I'll keep to work that seems to me sensible and enlightening, and to people who are interested in understanding and changing the world.

JohnB made the point that 'plain language is not enough when the frame of reference is not available to the listener'; correct and important. But the right reaction is not to resort to obscure and needlessly complex verbiage and posturing about non-existent 'theories.' Rather, it is to ask the listener to question the frame of reference that he/she is accepting, and to suggest alternatives that might be considered, all in plain language. I've never found that a problem when I speak to people lacking much or sometimes any formal education, though it's true that it tends to become harder as you move up the educational ladder, so that indoctrination is much deeper, and the self-selection for obedience that is a good part of elite education has taken its toll. JohnB says that outside of circles like this forum, 'to the rest of the country, he's incomprehensible' ('he' being me). That's absolutely counter to my rather ample experience, with all sorts of audiences. Rather, my experience is what I just described. The incomprehensibility roughly corresponds to the educational level. Take, say, talk radio. I'm on a fair amount, and it's usually pretty easy to guess from accents, etc., what kind of audience it is. I've repeatedly found that when the audience is mostly poor and less educated, I can skip lots of the background and 'frame of reference' issues because it's already obvious and taken for granted by everyone, and can proceed to matters that occupy all of us. With more educated audiences, that's much harder; it's necessary to disentangle lots of ideological constructions.

It's certainly true that lots of people can't read the books I write. That's not because the ideas or language are complicated -- we have no problems in informal discussion on exactly the same points, and even in the same words. The reasons are different, maybe partly the fault of my writing style, partly the result of the need (which I feel, at least) to present pretty heavy documentation, which makes it tough reading. For these reasons, a number of people have taken pretty much the same material, often the very same words, and put them in pamphlet form and the like. No one



seems to have much problem -- though again, reviewers in the *Times Literary Supplement* or professional academic journals don't have a clue as to what it's about, quite commonly; sometimes it's pretty comical.

A final point, something I've written about elsewhere (e.g., in a discussion in Z papers, and the last chapter of *Year 501*). There has been a striking change in the behaviour of the intellectual class in recent years. The left intellectuals who 60 years ago would have been teaching in working class schools, writing books like 'mathematics for the millions' (which made mathematics intelligible to millions of people), participating in and speaking for popular organizations, etc., are now largely disengaged from such activities, and although quick to tell us that they are far more radical than thou, are not to be found, it seems, when there is such an obvious and growing need and even explicit request for the work they could do out there in the world of people with live problems and concerns. That's not a small problem. This country, right now, is in a very strange and ominous state. People are frightened, angry, disillusioned, sceptical, confused. That's an organizer's dream, as I once heard Mike say. It's also fertile ground for demagogues and fanatics, who can (and in fact already do) rally substantial popular support with messages that are not unfamiliar from their predecessors in somewhat similar circumstances. We know where it has led in the past; it could again. There's a huge gap that once was at least partially filled by left intellectuals willing to engage with the general public and their problems. It has ominous implications, in my opinion.

End of Reply, and (to be frank) of my personal interest in the matter, unless the obvious questions are answered.

[Spelling adjusted to agree with UK English, formatting and quotation marks altered to conform with the conventions adopted at this site. *Italic* emphases in the original; links added. Some paragraphs merged.]

Rosa Lichtenstein's view: "The above comments neatly sum up my attitude, too -- except I wouldn't be quite as pleasant, tolerant or accommodating as Chomsky is with the work of these charlatans..., er..., "theorists" and "Paris intellectuals"."

[End Lichtenstein]

Source: [http://anti-dialectics.co.uk/page%2009\\_02.htm#Note%2031a](http://anti-dialectics.co.uk/page%2009_02.htm#Note%2031a)

### Or the Very Uplifting Sublation of the New Materialism

by a Descendant of Samuel Johnson Foote

Crust is not a new philosophy. Crust and its layers form a post-philosophical univocity coupled with a potentiated model of the multiverse. Crust has facticity, not a vocabulary! Crust is anti-phallic and cousin to a sheath.

Crust has been obscurized throughout the millennia by wordbanks of philosophy piled Pelion-upon-Ossa creating a proposition-ridden midden twenty-five centuries deep.

*Mutatis profundus*, the crucial point we must all engage with is that “de land” is stratified. Or in plane English, layered, deeply layered. After all, our biosphere is an earth crust and interseams with the inanimatosphere. Crusts are deeply intramental: they encompass the vertico-horizontal and the transversal, the superjacent and the bottomward, Tiramisu and Sex in a Pan. Crust is a layered femogenerative factuality of Existence.

The sophisticatedization of philosophical, philological and linguistic plications (layers - the terms are the same) has persisted over the aeons. Prefigurative proto-crusts burbled up in ancient times but they have been forcefully subjacented under a post-Babylonian Tower of unremitting philosophico-babble.

But! Precisely as Einsteinianism crusted over Newtonianism, and postmodernism and deconstructuralism crusted over the linear screeds of Marxism - and we must not omit the undialectic insubstantiabilities of Darwinism. Just as polyharmonious New Materialism crusts over binary postmodernism and deconstructionism with its panglossian (in the virtual sense) de-objectifying of language. So too, Crust overcrusts the New Materialism - and it goes without saying, but we do - in a crusty, biting way. We contemn criticism *as such*, but in introjecting much-needed revolutionary mojo, we aver that The New Materialism manifests as positivo-*impuissant* - while a world *in extremis* cries out for crustiness. Doesn't it?

At the same time, the New Crustaceans re-cognize that Marx had the enteric in-site that the goal of philosophy is to change the world, not to high-falutinize it, not to guatterize it with category-destroying parisology, fer crussake. The deleuzional New Materialists mortar their Oedifice with neologisms, but the hidden tell-tale of this slurry mudcake is that nominal adherents are troweled into the fold by citing their utterances, then overlaying them with “in other words” - since the original lingo doesn't matterialize with sufficient inclusionarity. The fact is: NewMats are like cats - they don't herd.

Still, through their skintillating gesturing, offering verbal jousting as an instantiation of revolutionary practice, and by their devotion to a demolition derby of language, the NewMats have unawaredly crusted over ALL of philosophy. Champagne all around! The volcanic post-Nietzschean upthrust is not that God is dead - No, Recurrence Forbid! - God and Philosophy are both kaput. All that remains is - not Christ, but Crust. CRUST IS.

The heck with a body without organs and self-organizing abstract machines. It's time to say goodbye to the Phil and Sophy show. In its place - the pure facticity of Crust.

Crust is the UR-slate: nonmental and nonverbal. But, alas, Crust must be schlepped over into this problematic by means of the piddle of prose. However, in a better world, a crustified world, we few, we happy few, would stand before the NewMats, pies in hand, and Crust Them Good in the Face.

But, you query, what are our dialectical desserts post-Crust? The New Crustaceans must fearlessly answer: It obviously (not lies but) "truths" in the deep dish of the Pie Without Crust.

\*\*\*

But HANG ON there, hang on - THIS is what comes next!

After writing the above, I was mole-ing through DeLanda's "1000 Years of Nonlinear History" and at the end of the tunnels, this light filtered in:

In terms of the nonlinear dynamics of our planet, the thin rocky crust on which we live and which we call our land and home is perhaps the earth's least important component (sic!). The crust is, indeed, a mere hardening within the greater system of underground lava flows which, organizing themselves into large "conveyor belts" (convective cells), are the main factor in the genesis of the most salient and apparently durable structures of the crusty surface.

Either directly, via volcanic activity, or indirectly, by forcing continental plates to collide, thereby creating the great folded mountain ranges, it is the self-organized activity of lava flows that is at the origin of many geological forms. If we consider that the oceanic crust on which the continents are embedded is constantly being created and destroyed (by solidification and remelting) and that even continental crust is under constant erosion so that its materials are recycled into the ocean, the rocks and mountains that define the most stable and durable traits of our reality would merely represent a local slowing down of this flowing reality. It is almost as if every part of the mineral world could be defined simply by specifying its chemical composition and its speed of flow: very slow for rocks, faster for lava. (page 255 in the pdf)

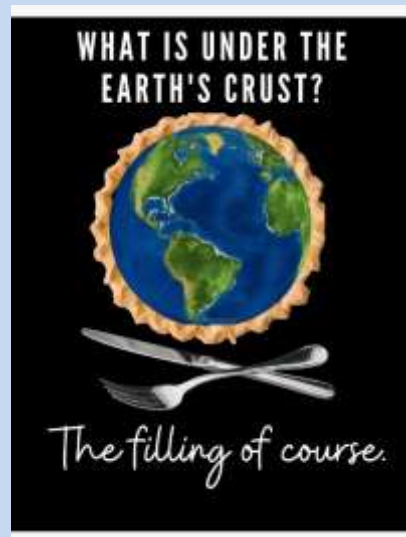
After unknowingly pancaking my parody, DeLanda leads us to the anthropo-sublatification, if not outright extinguishment, of us as human beings as we lead our pity-short lives here on this "pale blue dot":

Similarly, our individual bodies and minds are mere coagulations or decelerations in the flows of biomass, genes, memes, and norms. Here, too, we might be defined both by the materials we are temporarily binding or chaining to our organic bodies and cultural minds and by the timescale of the binding operation. Over the

millennia, it is the flow of biomass through food webs, as well as the flow of genes through generations, that matters, not the bodies and species that emerge from these flows. Our languages may also be seen over time as momentary slowing downs or thickenings in a flow of norms that gives rise to a multitude of different structures. And a similar point applies to our institutions, which may also be considered transitory hardenings in the flows of money, routines, and prestige, and, if they have acquired a permanent building to house them, in the mineral flows from which the construction materials derive.

Well, if Humans Don't *Matter*, we can take consolation that through it all the Essence of Crust remains.

Come Hell, High Water or the Second Coming of Jesus Christ, CRUST IS!



But again - Wait a Second!! Let's check to see what Engels had to say about Crust!

Furthermore, the whole of geology is a series of negated negations, a series of successive chatterings of old and deposits of new rock formations. First the original earth crust brought into existence by the cooling of the liquid mass was broken up by oceanic, meteorological and atmospheric-chemical action, and these fragmented masses were stratified on the ocean bed. Local upheavals of the ocean bed above the surface of the sea subject portions of these first strata once more to the action of rain, the changing temperature of the seasons and the oxygen and carbonic acid of the atmosphere. These same influences act on the molten masses of rock which issue from the interior of the earth, break through the strata and subsequently cool off. In this way, in the course of millions of centuries, ever new strata are formed and in turn are for the most part destroyed, ever anew serving as material for the formation of new strata. But the result of this process has been a very positive one: the creation of a soil composed of the most varied chemical

elements and mechanically fragmented, which makes possible the most abundant and diversified vegetation.

-*Anti-Dühring* by Frederick Engels 1877, Part I: Philosophy, XIII. Dialectics.  
Negation of the Negation

<https://www.marxists.org/archive/marx/works/1877/Anti-Dühring/ch11.htm>

So what would Engels say is the positive contribution from the wormy tunnelings of the New Materialists - the formation of new strata, the creation of fertile soil?

## Appendix 7 The Connection Between UFOs and Remote Viewing

Why include an appendix on the UFO-RV connection in a book largely about Marxist dialectics, philosophy and psi? Several reasons.

First, the reality of UFOs has been called “the story of the millennium” (by UFO researcher Stanton Friedman). It would be hard to cite a story of more importance than human contact with species from other star systems or other dimensions. We used to think the earth was the center of the universe and that we humans ruled over our domain – except of course those who believed that God did.

Then we learned that earth was not only not the center of the solar system, but Sol’s system itself was only one among over 200 billion stars in the Milky Way. And we learned there are trillions of galaxies. Deflation of human pretensions indeed.

Now physicists tell us that there may well be other dimensions and some long-time UFO researchers (Jacques Vallée, for example) have concluded that at least some UFOs likely come from another dimension. Anthropocentrism is further undercut with this prospect that this physical realm may be just one of many.

To make a Marxist connection here, Lenin had no doubt about the implications of contact with otherworldly beings:

Lenin told the British science fiction writer, H.G. Wells, who interviewed him in the Kremlin in 1920, that if life were discovered on other planets, revolutionary violence would no longer be necessary: “Human ideas - he told Wells - are based on the scale of the planet we live in. They are based on the assumption that the technical potentialities, as they develop, will never overstep 'the earthly limit.' If we succeed in making contact with the other planets, all our philosophical, social and moral ideas will have to be revised, and in this event these potentialities will become limitless and will put an end to violence as a necessary means of progress.”

Source: Stites, Richard. *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989) p. 42. From chapter 2: “Revolution: Utopias in the Air and on the Ground,” section “The Dreamer in the Kremlin,” pp. 41-46.

JK: There is dispute about just what Lenin said, but sources agree that Wells did interview Lenin in the Kremlin (and there is a photo).

Second, human experiences with both remote viewing and UFOs provide evidence that aspects of consciousness exist that Marxism and dialectics do not touch on. These experiences and the scientific work that has been undertaken to validate them take us outside the universe of discourse of Dialectical Materialism, and beyond the frontiers of what nearly all Marxists think reality consists of.

The commonalities of UFOs and remote viewing can be found in several areas. When people learn about the reality of either one, they often experience existential shock. Our materialist and reductionist upbringing and our cultural and scientific climate ignore or make fun of these realities. Every day now one sees posts by people who have heard about remote viewing, tried it, and -- Mind Blown! Alongside that the UFO literature is replete with decades of unsettling experiences of abductees and witnesses. Our sense of reality is shattered.

The facets of UFOs and RV that blow people's minds are the strangeness and uncanniness of the phenomena. What? A giant UFO can appear overhead and move silently? What? I can get information from a distant place just using my mind -- and from the future too? WTF.

Consciousness is another common aspect. In remote viewing we use facets of our mental makeup that we didn't suspect existed. Or as Ingo Swann referred to it, aspects of our "biomind". For many, the body plays a central role, displaying capabilities we didn't think we possessed. Though we lack an accepted physical theory of how remote viewing works, it is evident that the unconscious, in synch with the body, has access to information that everyday consciousness does not.

In the UFO literature, we find numerous reports that the UFOonauts, the aliens, the NHI (non-human intelligences) communicate with telepathy. Many experiencers report that these entities use non-human language that they can hear, but reports of telepathy are common as well. In remote viewing there is a phenomenon we call "telepathic overlay." This is when the data we get appears to have come from a person who is with the remote viewer and knows what the target is. We call it telepathy. We don't know if mind-to-mind communication is really happening or if both individuals are part of some sort of "Borg mind".

### **The remainder of this appendix will focus on the following**

1. The US government has at long last acknowledged the reality of UFOs. And so have the Russians, including under the materialist Soviet government.
2. There is an extensive overlap between UFOS and remote viewing -- in both the UFO experiences remote viewers have had and in the large amount of remote viewing of UFOs that has been done.
3. Consciousness and "telepathy" exist in remote viewing and in human interactions with UFOs.

### **The Pentagon has admitted UFOs are real**

What follows is a shortened version of an article by Jon Knowles and Daz Smith, *Remote Viewing Unidentified Phenomena in the USA and Russia*. Nexus magazine, July-August 2023.

<https://nexusmagazine.com/product/volume-30-number-4-downloadable/?v=7516fd43adaa>

After 75 years of deflection, denial, and ridicule by US government agencies, the truth is not only "out there" - it's in everyone's living room. The days of notoriously flimsy explanations such as swamp gas, weather balloons and crash dummies are over. Ridicule has vanished and Pentagon officials, TV anchors, and podcasts are treating the subject with the seriousness it has long deserved.

Beginning with a December 16, 2017 New York Times article by Helene Cooper, Leslie Kean, and Ralph Blumenthal, pressure began to build up on the Department of Defense to come clean. The NY Times story featured an incident in which US Navy pilots witnessed a 40-foot TicTac-like object perform seemingly impossible maneuvers, narrowly missing an F/S 28 Super Hornet jet head on. The wingless objects were captured on Navy FLIR radar and the recordings went viral upon release. The article revealed the existence of AATIP (Advanced Aerospace Threat Identification Program), a government agency that tracked UFOs though the Pentagon had denied it was doing so.

The pressure campaign became powerful due in large part to a group called To the Stars Academy created by Blink-182 rock singer Tom DeLonge, physicist Hal Puthoff, and former CIA intelligence officer Jim Semivan. Two DoD insiders, Lue Elizondo and Chris Mellon, had tried to get the word out about the reality of UFOs and after years of frustration joined TTSA, making it a potent advocate for disclosure.

By 2021 the situation had reached the point that Congress passed an act requiring the Pentagon to provide regular updates about UFOs (now called UAP - Unidentified Aerial Phenomena). The Department of Defense delivered a “Preliminary Assessment” in June 2021 and a second report in January, 2023, neither of which was forthcoming but was a giant first step. Now even NASA is going to explore this elusive mystery.

In years past similar efforts were mounted by Senator Harry Reid of Nevada and John Podesta, President Clinton's Chief of Staff. Representative Steven Schiff of Arizona was another official who sought to get the truth out about events like the Phoenix lights, a wave of unusual lights witnessed by hundreds of citizens in mid-March 1997. Former Governor Fyfe Symington trotted out a tall “alien” at a press conference, but later admitted the lights were unexplainable. However, these efforts at disclosure were unable to crack the wall of ridicule and resistance by the media, the Pentagon and major corporations - with a few of the latter being suspected of holding crashed UFOs and probably dead aliens.

### **Remote Viewing and UAP**

Not only is the reality of each of these esoteric fields now acknowledged by US authorities, but there is a strong connection between them. For example, remote viewers have undergone typical UFO experiences. Joe McMoneagle sustained a burn from an overhead disc while in the service in the Bahamas in 1966. Ft. Meade viewer Lyn Buchanan and RV pioneer Angela T. Smith experienced very unusual events, which it took them 20 years to confirm as alien abductions. At least four viewers in TransDimensional Systems claimed to see alien beings in their homes, and the leader of TDS reported frequent night-time appearances of a “Grey Dude” in her bathroom. Other viewers have seen and photographed orbs flying around their homes. Ft. Meade viewers Mel Riley, Ed Dames and David Morehouse reported a “portal” opening in the sky near Chaco Canyon, New Mexico during their trip there. Controversial professor Courtney Brown has promoted the idea that there is a Galactic Council and even filmed a video of himself beseeching the Council.



As in the UFO field, there are more and less believable accounts and figures within the remote viewing community, such as alleged UFO bases under mountains, a previous civilization on Mars and large artificial structures on the moon.

One of the strongest and most convincing UFO-RV connections can be seen in the remote viewing done by Joe McMoneagle of the 1986 Japan Airlines Flight 1628. McMoneagle's session is reported in Tunde Atunrase's book, *Remote Viewing - UFOs and the Visitors*. Viewing blind (that is, knowing nothing about the target), McMoneagle described a "classic UFO approximately 490-500 feet in length, 200-230 feet across in width, and about 55-65 feet in depth or thickness from top to bottom."

The pilot of the Japanese Airlines 747, flying a cargo of wine from Paris to Anchorage on November 16, 1986, reported seeing two banks of lights and then a spaceship just outside his windows. He said the craft was "twice the size of an aircraft carrier." An aircraft carrier is far larger than the dimensions McMoneagle gave, but he did say that the target was a very large UFO, which is remarkable since the target could have been anything in the universe. McMoneagle also provided a star map, with the bulk of his session being about the origins of the craft rather than what the 747 crew saw.

This is a remarkable correlation between a remote viewing session and a well-documented UFO event. The pilot, co-pilot and the crew member all reported seeing strange lights which were extremely bright and so close that the pilot felt heat from them. Tapes of conversations between the pilot and ground control document the 50-minute event. Additionally, radar showed an object tailing the 747. While the recordings and the pilot's later reports are not entirely consistent, the pilot (Kenju Terauchi) had over 10 thousand hours of flying time and was a former fighter pilot. He would know whether he saw clouds, ground lights or a giant spacecraft just outside the windows of his 747. He risked ridicule for reporting the sighting but did so; and he was assigned other duties for a time.

Some UFO experiencers report that ETs often hear or sense messages in their heads. While in the UFO community it is commonly thought that most experiencers report such telepathic communication, this may not be accurate. From cases cited by Jacques Vallée, John Good and Marc Davenport, a tally made by the present authors indicates that ETs used their own language 49% of the time during encounters, earth languages 45% and telepathy only 9% of the time. Of course, any use of telepathy is remarkable. The literature does indicate that most abductees report hearing a voice in their head and UFO contactees and witnesses across the globe consistently report telepathic communication.

One link between telepathy and remote viewing lies in the fact that RV is largely a mental skill craft (some hold that the body is intimately involved). The information appears to come via the unconscious, although some consider the body to be the "transducer." There is even a phenomenon in remote viewing called "telepathic overlay," which is said to occur when a viewer picks up the thoughts of whoever chose the target. Further, there is a widely reported classroom effect in which viewers do better in a group setting with everyone directing their attention to the same target, while afterwards at home results fall off markedly.

## **What does the public think about UFOs and remote viewing?**

Surveys vary -- in the specific questions they ask and in their reliability. The following is a rough estimation, primarily about the existence of UFOs and whether life exists outside the solar system.

Gallup polls show a sharp increase from 1947 when only 10% thought that flying saucers were real to 48% in 1966. This stayed about the same at 45% in 1996.

Roper polls show a fairly narrow range from 1977 to 2002 of 18 to 29% belief in the existence of civilizations on other planets. Reuters surveys report 45% or higher since 2002 for the same topic.

Countries vary in their opinions on these questions. For example, in 1997 78% of Canadians believed that civilizations exist on other solar systems. Russians were at the top of a large 2002 survey (26,000) at 65% on the same issue. The lowest figure was by the Dutch at 28% while the US was at 45%. In the last couple of years, polls indicate about one-third of the American public believes that UFOs exist.

One figure that is consistently above 50% is the percentage of people believing their government is not telling everything it knows. This goes as high as 80% (USA 1997).

There are fewer surveys for belief in ESP/psi and none for remote viewing, a term which is still little known by the public. For ESP/psi, belief ranges from 50 to 65% from 1996 to 2022 for the US. Russian surveys and polls are few and are considered unreliable, but in 2015 the Levada Center's reported that 63% of Russians thought that ESP was real. Consulting psychics has been a big business, reflecting the long history of belief in the paranormal in Russia (e.g. shamanism).

## **Does Russia face the same dilemmas?**

Can a country with seven decades of government-enforced materialism have a remote viewing AND a UFO problem? Yes, it can.

Trips to Russia by UFO expert Jacques Vallée (1990) and by reporters Henry Gris and William Dick (1978) convinced all three that not only were UFOs considered real in Russia, but unlike in the US, Russian scientists and government officials were certain of their existence and willing to say so. TV Reporter George Knapp and former Intelligence officer C.B. Scott Jones had similar conclusions from their visits to Russia.

In fact Russia has had extensive UFO and remote viewing programs over the decades, both under the Soviets and after the fall of the USSR (1989 to 1991). The Soviet government even conducted a country-wide program for ten years in which every member of the military was required to report any UFO sightings. On a few occasions planes were ordered to shoot down UFOs, but when two pilots died in a crash, orders were given to avoid contact.

Not only are UFOs real, but Paul Stonehill authored a book about USOs -- Unidentified Submersible Objects, which were often seen in Russia. USOs have also been widely reported elsewhere in the world, though the media mainly covers UFOs.

## **The Voronezh UFO flap**

Over 30 people have witnessed the landings in Voronezh. Thousands have seen the objects in flight.

- Aviation engineer Alexander Mosolov.

Of the many reports of UFOs in Russia, the events that took place in Voronezh in 1989 were the most publicized and are representative of what has been seen all over Russia for decades. The first-hand sightings and experiences display many of the same startling facets of UFO encounters across the globe.

Initial reports in TASS said that on September 27, 1989 a pink sphere was seen in the sky, then became a craft hovering five feet above the ground. A 10-foot tall being with three eyes emerged from the craft along with a robot. Shortly, the robot pointed a rifle-like object at a boy who immediately disappeared but reappeared when the craft took off.

The TASS story was picked up by Western media, whose articles were lambasted by Jacques Vallée in *UFO Chronicles of the Soviet Union*. Vallée took the trouble to go to Voronezh, reviewed the reports with local UFO researchers, and did his usual thorough investigation.

The results, contrary to many Western reports, were that the sightings at Voronezh took place on several days, not just one. They were witnessed by dozens of adults, not just by children. Residents saw several different types of objects in the sky and on the ground, not just one. And finally, three types of creatures were reported not two.

According to Vallée, the first type of being was the 10-foot tall creature already referred to. Some witnesses said two of the eyes were whitish and a third eye between them was red and lacked a pupil. Other witnesses thought there were two eyes with something else between them. The second entity was the robot, which appeared to be a box with something resembling a head on top. The third type were small two-eyed beings with “grayish-green faces and blue overcoats that look like loose raincoats.”

In the sightings on September 27, some observers reported that they first saw a pink glow and then a red ball about three meters in diameter. The craft was thought to be about 45 feet in diameter and 18 feet thick, with a hatch in the middle. Some reports said the object remained roughly 5 feet above the ground, but in other sightings scientists examined landing traces and concluded that the object weighed about 11 tons. Various types of craft were seen during the flap, including the customary saucer shape.

### **Some observations**

The existence of UFO and psychic operational programs in both Russia and the United States raises important questions. For example, are government programs still in existence in each country for each phenomenon? Is remote viewing being used to shed light on UAP? It has the potential to do so.

The US government maintains it ended its remote viewing program in 1995. It now admits that UAP are real and is investigating the phenomena. We are not aware of recent reports from Russian sources about whether either program continues. An obvious observation is that if the Russians are using psychics on the frontlines in the Ukraine war, they have been apparently been failing to make a significant difference.

But the larger questions involve the impact these two mysterious and powerful phenomena have on these societies and every other country. The strange reality of UFOs gives us a taste of the coming radical shift in our understanding of the universe and of our history on earth. The puzzling reality of remote viewing portends a fundamental change in our understanding of consciousness and how interrelated we are as human beings. The questions are existential for Russia, for the United States and for humanity. The future beckons - with spectral hands.

### **Other facets of the extensive and deep connections between UFO's and remote viewers**

[Excerpted from a presentation by Jon Knowles at the International Remote Viewing Association's PsiFest conference in August 2023]

The U.S. government has long denied the reality of the UFO phenomenon. Its explanations since the 1940's have included: Mass hysteria, hallucinations, hoaxes, conventional aircraft, the U2 Venus or other planets, meteors, solar reflections off seagulls, temperature inversions, large hailstones, ice crystals, swamp gas (Hynek, "marsh gas"1966), weather balloons, spy balloons (Mogul), crash test dummies dropped from balloons (1994).

While the government has been skeptical about UFO sightings and extraterrestrial encounters, they were more convinced about remote viewing. In fact, they funded a 20-year research and intelligence operations program at a cost of \$20 million to study remote viewing. The program was kept secret, but it was real.

Millions of Americans claim to have seen UFOs or had an experience with UFOs/aliens so it stands to reason some remote viewers would have had such experiences or sightings and because they are striking, would remember them. And in fact many remote viewers are witnesses to UFO events or experiencers. It is unknown if a higher percentage of remote viewers have UFO sightings or experiences than has the general public. The following tables referring to well-known figures attest to the breadth of UFO experiences in the remote viewing community.

**Table 1: “First Generation” remote viewers**

<b>Person</b>	<b>UFO-related experience</b>	<b>Activities</b>
Ingo Swann	Penetration, viewed entities on Mars	The Case for UFOs, The UFO Extraterrestrial Problem; Subtle & Hidden Factors regarding the UFO-ET Situation
Joe McMoneagle	saw bright UFO in Bahamas, had burn, Oct 1965	Viewed JAL1628 UFO; viewed entities on Mars; client work for L.M. Howe, Bob and Ryan Wood
Pat Price		Claimed to view 4 alien earth bases
Hal Puthoff	To the Stars Academy, Nat’l Institute for Discovery Science	SRI program manager 1975-1985; CRV co-creator
Uri Geller	UFOs guided him	Subject in SRI research
Angela Smith	abducted	client work and channeled aliens
C.B. Scott Jones	abduction as a child; saw silver disc as fighter pilot	Book on exobiology; MUFON consultant
Lyn Buchanan	abducted	Government contract work on UFOs
David Morehouse	Saw “portal” open in NM	Presented at UFO Conferences
Ed Dames	Tasking of UFOs at Ft. Meade, promotion of UFO stories	New Mexico trip to seek UFO portal (with Mel Riley & David Morehouse)
Jacques Vallee	Saw UFO in 1955; a leading UFO researcher	Consultant to SRI; trained CRV. Wrote: UFOs: the Psychic Solution
Rima Laibow	Claimed abduction	Organized TREAT

**Table 2: “Second Generation” remote viewers**

Courtney Brown	ETs on his bed as a kid	Galactic Council claims; Hale-Bopp comet
Prudence Calabrese	Saw orange UFO at age 13. Bathroom visits by Grey Dude	Hale-Bopp comet
Simeon Hein	saw UFO overhead c. 1972	Presents at UFO conferences
John Vivanco	Has seen “Paraphysicals”	Saw UFOs in photos in desert
Joe Murgia	Part of Prudence’s TDS team	Became “UFO Joe”
TDS viewers	Hammerhead alien visitors	
Leigh Culver	Wrote book on UFO research	Taught CRV
Steven Greer	Saw UFO at ages 8 and 35	Disclosure Project. CSETI outings. Claims to use remote viewing

Note: Steven Greer is a well-known UFO researcher who has headed up his Disclosure Project for decades. He now claims to be using remote viewing.

## **Second and Third Generation Remote Viewing (UFO-related)**

Future Forecasting Group / Dick Allgire

<https://www.youtube.com/@FutureForecastingGroup>

What did we see at Skinwalker Ranch? Bob Lazar's UFO Secrets, Unveiling the Atlantic Space Ark, Real UFO Disclosure, Why we CAN'T Trust Aliens, How many times have you had an alien remote viewing target?, The GOOD Aliens Will Help Us, Remote Viewing Team Chit Chat about AI-Aliens

Daz Smith, Paranormal Viewing. Also a member of Future Forecasting Group

<https://www.youtube.com/@ParanormalViewing>

Skinwalker Ranch-UFO/UAP, Phoenix Lights (1997), Roswell, Area 51, Council of Nine, Cattle Mutilations, the Moon

Daz Smith, Hellfire Remote Viewing Club

<https://www.youtube.com/@hellfireremoteviewingclub3032/>

The Nimitz TIC TAC UAP encounter, Remote Viewing Whitley Strieber's Implant, Kepler 452B planet

Edward Riordan. Also a member of Future Forecasting Group

<https://www.youtube.com/@erviewer/videos>

I remote viewed a UFO!, Apollo 16 EVA, USO imaged by Ocean Explorer's side-scan sonar

Nyam Vendryes. Also a member of Future Forecasting Group

<https://www.youtube.com/@Nyiamtv/videos>

Disappearance of Fred Valentich

Simeon Hein. Resonant Viewing, UFO reporting (over 50 videos), Crop Circles, Multiverses

<https://www.youtube.com/@Fractalfriend/search?query=ufo>

Henni Hajdu, RV Projects Hungary

<https://www.rvprojects.hu/>

Phobos II, Roswell rock, UFO house in New Zealand, Moon rocks

John Adams, Adventures in Remote Viewing

<https://www.adventuresinremoteviewing.com/>

Skinwalker Ranch, Jellyfish UAP, David Grusch the Whistleblower, Phobos 2: Mission to Mars, The "Alien Interview" (energy grids and possible bases), Mass UFO event over Austin, The Interstellar object, the Signal (strange radio source), Disclosure and the "death traps", UFOs': A case of fraud?

## **Additional Resources:**

**Remoteviewing.link**

<https://remoteviewing.link/>

Curated links to 120+ *remote viewing* sites - research, sessions, videos, books, forums, reports, observations, targets, tools and training.

Remote viewing is a form of "psi" and is a genuine phenomenon. It is not yet a science, because there is no acknowledged theoretical framework to explain it. However, many scientific experiments to explore it have been carried out (see [Articles and Papers @ IRVA.org \(opens new window\)](#)).

There are three main methods of remote viewing: a) simple / natural RV as practiced and recommended by RV pioneers Joe McMoneagle, Stephan Schwartz and Russell Targ; b) Controlled Remote Viewing (CRV) and offshoots (e.g. TDRV, SRV, TRV) also known as "method viewing", which is practiced by the majority of people active in the field. Ingo Swann, the "Father of Remote Viewing" used a natural method himself, but was also the primary developer of CRV. c) Extended Remote Viewing (ERV), RV done in a state of extreme relaxation. Some viewers combine CRV and ERV.

"For remote viewing to have a more positive influence on our future, it must be found useful at the grass roots level where goal oriented individuals can perceive its applications for the common good. Only those individuals who have made some effort to understand it as a personal experience will be in a position to comprehend more fully the potential of it. They are the advanced thinkers who will redefine the boundaries of consciousness."  
- Ingo Swann

**Isaac Koi:** Enormous collection of UFO docs and RV-related ones as well.

<https://www.isaackoi.com/>

<https://www.abovetopsecret.com/forum/thread1074447/pg1>

RV-related are **in bold**.

Section F1 : Rendlesham Forest incident

Section F2 : Cash-Landrum sighting

Section F3 : Carl Higdon's sighting

Section F4 : Cattle mutilation

**Section F5 : "MARS, 1 MILLION BC"**

**Section F6 : "Galactic Federation Headquarters"**

**Section F7 : "ET ACTIVITY AGAINST US PROGRAMS (TRAINING)"**

Section F8 : Fleeting impression of a UFO

Section F9 : Underwater "flying saucer"

**Section F10 : "ET Bases" on Earth**

**Section G : The UFO Connection - Remote Viewers within ufology**

**Section G1 : Pat Price - Alien bases on Earth**

**Section G2 : Skip Atwater - Project 8200**

**Section G3 : Ed Dames - Early public link between UFOs and remote viewing**

Section G4 : Uri Geller - Powers from "Spectra"

**Section G5 : Ingo Swann - Penetration and barely covered alien bosoms**

**Section G6 : Joe McMoneagle - UFO sighting in 1965**

**Section G7 : Lyn Buchanan – Alien abduction (1960s)**

**Section G8 : Courtney Brown - Hale-Bopp and Heaven's Gate**

Section G9 : Livermore group – Tiny UFO

**Section G10 : Mel Riley – Mars**

**Section G11 : Paul Smith – Mars**

**Freedom of Information Act Electronic Reading Room**

<https://www.cia.gov/readingroom/collection/stargate>

**Swedish Collection.** Enormous. Contains collections from several countries.

<https://www.afu.se/collections/report-files/>

RV is supposed to be fun, so here's a little humor:

**UFO DISCLOSURE: Dr. Cess Poole & Dirk Reynolds Discuss ETs, UAPs, Aliens**

<https://www.youtube.com/watch?v=yCiB5s2UqT8>



## Appendix 8 Parapsychology Around the World

Brief entries on parapsychology in China and other countries.

### China

**Martin Ebon**, *Psychic Warfare: Threat or Illusion?*

p16 in pdf

...a writer in the Peking journal *Scientia Sinica* (July-August 1975) cited Lenin as having written to Maxim Gorky (November 13 or 14, 1913) that parapsychology represented "the most inexpressible foulness" and "the most shameful 'infection.'" The Chinese writer, eager to make his point along then-dominant policy lines, failed to mention that Lenin's reference was not to parapsychology as such but against religio-superstitious practices in general.

...The Chinese theoretician concluded that "all this points to the fact that only by way of the sense organs can external stimuli be transformed into conscious facts."

134 As noted earlier, parapsychology was denounced in extravagant terms during Mao's lifetime. It has had a spectacular renaissance, beginning in 1979. I have traced this development in a paper, "Parapsychology in Contemporary China," published in the *Parapsychology Review* (September-October 1981), noting that Hsu Hung-Chang of the Paraphysics Group, Institute of High Energy Physics, Academia Sinica in Beijing (Peking) has stated that "more and more individuals with intense psi functioning, including almost all kinds of PK and ESP, have been proven to be valid throughout our large country."

163 Hsin Ping, *The Rampancy Of Parapsychology and the Decline of the Superpowers*.

The paper reproduced on these pages was published in the Peking journal *Scientia Sinica*, July-August 1975. It accused the United States and the Soviet Union of encouraging parapsychological studies in order to detract from socio-economic difficulties. An article along similar lines appeared in the Chinese Communist Party's theoretical journal, *Hung Chi* (Red Flag) on January 1, 1975. Both articles associated parapsychology with "religious superstition." However after Mao Zedong's death, the Peking government changed emphasis concerning a wide variety of social and economic trends.

**Puthoff, Harold E.**, *Psychoenergetics Research in the People's Republic of China* (1982)

<https://www.cia.gov/readingroom/docs/CIA-RDP96-00792R000400320001-8.pdf>

JK: Hal Puthoff was head of remote viewing research at the Stanford Research Institute, 1975-1985. Puthoff went to China with legendary researcher Stanley Krippner in 1981, met with scientists and saw demos. Puthoff reported that research was done by qualified scientists and had increased a lot since 1979. A boy who could "ear read" created a sensation. He was 80% accurate. Radiation may affect special film inside objects containing the target (e.g. a Chinese character). The Chinese claim an unknown form of radiation exists. It is mostly children who have displayed the ability. The ability may be related to Qigong (chi-gong), a breathing discipline.

**Nie Chongrung**, *I Resolutely Support Scientific Research in ESP*, Chinese Journal of Somatic Science, Vol 1., No. 4, 4<sup>th</sup> issue, August 1991.

In recent years, the U.S. and Soviet authorities have advocated and subsidized researches into psychic phenomena. Numerous scientific organizations, military research centers and many scientists (including those in the field of high-energy physics, astronautics, computer technology, laser device, etc.) are participating in this undertaking, in addition to the research institutes and personnel specifically concerned. Scientific journals, popular magazines and newspapers have repeatedly published articles and reports on this subject.

Some of them even boasted that parapsychology is "a new scientific paradigm, like Newton's laws of motion or Einstein's theory of relativity." (1) The Soviet Union, on the other hand, has put up a clamor that parapsychology makes "science move on to the threshold of an outstanding discovery," (2) and that parapsychology "is no illusion, it is fact." (3) Just as Lenin pointed out: "In the marketplace it often happens that the vendor who shouts loudest and calls God to witness is the one with the shoddiest goods for sale" (*Workers' Unity and Intellectualist "Trends"*). The great fuss made of parapsychology by the two superpowers is precisely of this kind.

**Nie Chongrung**, (cited in Ebon, *Psychic Warfare: Threat or Illusion?*)

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=9cc65605ff582af76bebad3d0534315af45bb8fa>

[Cited in Ebon, p 164:]

Parapsychology, from its beginning, is a reaction to materialism. Its main body, the so-called ESP, is in direct opposition to the theory of knowledge of dialectical materialism. As to why parapsychology "received the greater interest and the greater amount of investigation," J. B. Rhine, the American authority in psychical research, avowed: "The reason was that telepathy was believed to offer a special challenge to materialism, and materialism had begun to dominate the intellectual thought of the day." Hired scholars of the Soviet revisionists' clique also have similarly stressed that the "facts" of parapsychology must be used as a basis "to give an impetus to the development of theory, and to make new generalizations and conclusions." Based on "clairvoyance" they have made an epistemological formula which states that knowledge runs directly "from the outside world to the brain"; another formula from telepathy is that knowledge can be transmitted "from brain to brain." Such are the vicious attacks they have unscrupulously launched on the theory of knowledge of dialectical materialism.

The theory of knowledge of Marxist dialectical materialism holds that knowledge is a reflection of the objective external world, which can be fully made known to man. Knowledge, being a complex dialectical process, passes from perceptual to rational knowledge and then [has] to be applied in social practice to ascertain whether it is correct. Chairman Mao in his brilliant work *Where Do Correct Ideas Come From?* has pointed out: "Often, a correct idea can be arrived at only after many repetitions of the process leading from matter to consciousness and then back to matter, that is, leading from practice to knowledge and then back to practice."

166 Marx pointed out: "... the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations" (*Theses on Feuerbach*). This marks the fundamental distinction between dialectical materialism and old materialism, as well as various forms of idealism. Man's reflection of external reality is conditioned by given social and class

factors, always exhibiting the relationship of man to his surrounding world. Thus, there are differences among different individuals in their reflection of the same external reality.

Hence, the crucial points of the artifact of ESP in parapsychology may be summarized thus.

In the first place, there is the denial of the role of sensory activity and of practice in the process of knowledge. Once the sense organ [is] being bypassed, the brain is cut off from the outside world, thereby leading to a negation of the possibility for the brain to reflect external objects through practice.

The revisionists' so-called "from outside world to the brain" formula denies the fundamental principle that consciousness is a reflection of the objective world. And their so-called "from brain to brain" formula is, in essence, a statement that human consciousness has been bestowed to us from heaven, or is innate in the mind. The term brain in the vocabulary of the parapsychologists is but a synonym for the soul. Recently, in an American publication we have read such words as: "All of the body is in the mind, but not all of the mind is in the body," which openly discloses the idealist apriorism of parapsychology. In the struggle between the two lines of epistemological thought in the history of philosophy, parapsychology always belongs to the reactionary idealist camp.

In the second place, there is the denial of the class nature of social practice, and of the class nature of thought and knowledge brought about by practice. The so-called ESP and the epistemological formula of "from brain to brain" neither base themselves on objective reality, nor admit their verification by objective reality, so that in this way knowledge is erroneously reduced to the spontaneous activity of the brain itself. Consequently, all knowledge and thought lose their class nature, and thus parapsychology denies the distinction between revolution and counter-revolution, ignores the facts of class struggle and plays the part of an apologist for imperialism, revisionism and counterrevolution.

169 The frantic craze for parapsychology in the U.S.S.R. has aroused astonishment even in the United States. One commentator said: "The Soviet Union has studied ESP for years, and the Russians' work, considered ahead of U.S. efforts, looms like a psychical Sputnik." Another said: "None of the Western parapsychologists foresaw that it was a Russian university which took the lead in establishing a research laboratory of parapsychology financed by the government." Thus in U.S., to keep up with the other superpower, the Pentagon and CIA constantly keep themselves well informed on new developments in parapsychology. NASA, NRC and other organizations as well as the U.S. Federal Government have readily offered financial support for psychical research.

**Dong Shen, Run-Sheng Shen, Gang Li**, *Laboratory Investigations of Extrasensory Identification of Concealed 5-Character Codes by a Presumably Gifted Teenager in China*, *Journal of Scientific Exploration*, Vol. 35, No. 3, pp. 570–589, 2021

<https://journalofscientificexploration.org/index.php/jse/article/view/1827>

Abstract—We report on laboratory investigations of extrasensory identification of object information against a visual sensory barrier conducted on a presumably gifted teenage female subject in China. The investigations challenged the subject to identify a 5-character code (black, bold, Arial, font size 14) prepared by a double-blind procedure and sealed to block ordinary

sensory access. Each of the five characters of each sealed code were randomly generated by computer permutation among 34 choices, including capitalized letters of A to Z and numbers from 2 to 9, by a third party at a remote site before mailing to the examiner. The subject's attempts to identify, via self-claimed extrasensory means, the concealed 5-character code over the duration of each trial was monitored and video-recorded. Trials of 16 and 18 tests were conducted approximately three months apart. Of the total 34 trials, the subject made a full hit (i.e. five correct characters at the entirely correct sequence) five times, corresponding to a binomial probability of  $p < .00001$ . We conclude that extrasensory identification against a visual sensory barrier deserves further investigation.

JK: Amazing results in this carefully done study.

### **Australia and Asia**

<https://psi-encyclopedia.spr.ac.uk/articles/experimental-psi-research-asia-and-australia>

### **Bulgaria**

<https://gdil.org/the-vanga-files/>

Google “Baba Vanga” and you will get almost three million English-language hits that link to sites and posts about this legendary Bulgarian. Baba (or Grandmother) Vanga became famous in her lifetime (1911-1996) and continues to capture the imagination of Bulgarians and a global (virtual) public who revere her as psychic, seer, healer, saint, and prophet, or revile her as charlatan, spy, or medium for “demons”. But Vanga has far more fans than naysayers, who continue to circulate her predictions and prophecies—on everything from 911 and the Corona Virus to the war in Ukraine.

### **Czechoslovakia - Milan Ryzl**

JK: Leading parapsychological researcher, author of several books, emigrated to the United States.

[https://www.academia.edu/33307887/In\\_Memoriam\\_Milan\\_Ryzl\\_1928-2011](https://www.academia.edu/33307887/In_Memoriam_Milan_Ryzl_1928-2011)

<https://www.encyclopedia.com/people/medicine/psychology-and-psychiatry-biographies/milan-ryzl>

### **German Democratic Republic**

<https://balticworlds.com/occultism-in-the-gdr/>

### **Europe**

<https://psi-encyclopedia.spr.ac.uk/articles/experimental-parapsychology-europe>

### **Ibero-America**

<https://documents2.theblackvault.com/documents/cia/stargate/STARGATE%20%232%20174/Pa rt0001/CIA-RDP96-00792R000400100006-7.pdf>

### **India**

<https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/parapsychology-indian-journal-parapsychological-research>

### **Israel**

<https://psycnet.apa.org/record/1983-20009-001>

**Latvia**

<https://journals.sagepub.com/doi/10.2466/08.17.PR0.116k14w9>

**Lithuania**

[https://www.cesnur.org/2004/waco\\_alisauskiene.htm](https://www.cesnur.org/2004/waco_alisauskiene.htm)

**Russia**

<https://psi-encyclopedia.spr.ac.uk/articles/psi-research-russia>  
<https://psi-encyclopedia.spr.ac.uk/articles/psi-research-russia>  
<https://www.vox.com/2014/11/13/7210517/russian-psychics-everywhere>

**Spain**

<https://www.proquest.com/openview/43a0eae1e9e2431f83c795549cfc48f5/1?pq-origsite=gscholar&cbl=1818062> (downloads)

**Ukraine**

[https://www.researchgate.net/publication/339166445\\_The\\_current\\_state\\_of\\_Psi-studies\\_and\\_the\\_public\\_concept\\_of\\_parapsychology\\_in\\_Ukraine](https://www.researchgate.net/publication/339166445_The_current_state_of_Psi-studies_and_the_public_concept_of_parapsychology_in_Ukraine)

**Vietnam**

[https://www.igpp.de/eks/pdf/BW\\_2021\\_4.pdf](https://www.igpp.de/eks/pdf/BW_2021_4.pdf)  
<https://sites.google.com/a/uw.edu/vietnamstudiesgroup/discussion-networking/vsg-discussion-list-archives/vsg-discussion-2010/research-into-the-paranormal>  
<https://ruickbie.com/2020/12/15/parapsychological-adventures-in-vietnam/>

**Yugoslavia**

<https://balticworlds.com/i-was-fascinated-by-the-extent-of-occulture-in-a-communist-country-like-yugoslavia-of-the-1970s/>

[https://hellboy.fandom.com/wiki/Bureau\\_for\\_Paranormal\\_Research\\_and\\_Defense](https://hellboy.fandom.com/wiki/Bureau_for_Paranormal_Research_and_Defense)

## Appendix 9 Richard Feynman and Quantum Mechanics

Preliminary: At least 15 interpretations of quantum mechanics may be found in Wikipedia (2024).  
[https://en.wikipedia.org/wiki/Interpretations\\_of\\_quantum\\_mechanics](https://en.wikipedia.org/wiki/Interpretations_of_quantum_mechanics)

JK:

1. Copenhagen interpretation, which is dominant and has received the most votes at one or two polls at conferences.
2. Many Worlds of Hugh Everett has gained some adherents.
3. Consistent histories, which generalizes the Copenhagen interpretation.
4. Quantum information theories like John Wheeler's "it from bit". These have been described as a revival of immaterialism. They are similar to instrumentalism.
5. Ensemble, also called the statistical interpretation, makes few assumptions, is a minimalist interpretation. Leslie Valentine, professor at Simon Fraser is the most prominent advocate of this approach
6. Relational quantum mechanics. One version was developed in an analogy with David Bohm's (views) of special relativity.
7. Transactional interpretation by John Cramer inspired by the Wheeler-Feynman absorber theory.
8. Stochastic mechanics, suggested by Professor Edward Nelson in 1966. An alternative stochastic interpretation was developed by Tsckov.
9. Objective collapse theory. Examples include the Ghirardi-Rimini-Weber theory and the Penrose interpretation. They differ from the Copenhagen in regarding both the wave function and the collapse process as ontologically objective.
10. Consciousness causes collapse interpretation of von Neumann and Eugene Wigner. However Wigner later abandoned this interpretation. Other physicists in this vein are Henry Stapp, Bruce Rosenblum, Fred Kuttner, and Amit Goswami.
11. Many minds interpretation.
12. Quantum logic approach of Garrett Berghoff in 1936 and John von Neumann.
13. Modal interpretation of quantum theory proposed by various authors.
14. Time-symmetric theories.
15. Branching space-time theories.

Thus, there are many interpretations of quantum mechanics, while many of them use the same (or closely related) equations.

P.A.M. Dirac, for one, refused to attempt to interpret the results.

Given the multitude of interpretations of abstruse mathematics which most of us don't understand, it is merely speculative for anyone to assert which one is best. If even the physicists who understand quantum mechanics differ so widely, those of us who are laymen are at a huge disadvantage. One can offer an opinion based on what seems like the most logical one or one's gut feeling or simple preference, but it is simply an opinion. What is the cash value, as they say, of having one of these opinions? Well, one advantage would be that if the interpretation helps explain remote viewing or other parapsychological phenomena, that would be of value. That statement of course depends on whether you think that psi exists. Since I do, and that it's been well demonstrated by experiments and in operational practice, it would make sense for me to prefer one of the

interpretations that either explicitly or implicitly allows for such things as viewing objects and events at a great distance from the viewer and even in the past or the future. I have been leaning towards David Bohm's interpretation, which does encompass the possibility of psi, but I am *wavering*.

## **Richard Feynman**

Richard Feynman is one of the most engaging of physicists, in this appendix, let's see how he interprets quantum mechanics - and also see if dialectics emerges in them.

Let's start with, Ulrich Mutze, *Is computation a reasonable metaphor for what Nature is doing?* [https://www.researchgate.net/post/Is\\_computation\\_a\\_reasonable\\_metaphor\\_for\\_what\\_Nature\\_is\\_doing](https://www.researchgate.net/post/Is_computation_a_reasonable_metaphor_for_what_Nature_is_doing)

### **Mutze:**

Probably nobody has formulated the underlying problem clearer than Richard Feynman in his booklet *The Character of Physical Law* (1965), pp. 51, 52:

It always bothers me that, according to the laws as we understand them today, it takes a computing machine an infinite number of logical operations to figure out what goes on in no matter how tiny a region of space, and no matter how tiny a region of time. How can all that be going on in that tiny space? Why should it take an infinite amount of logic to figure out what one tiny piece of space/time is going to do? So I have often made the hypothesis that ultimately physics will not require a mathematical statement, that in the end the machinery will be revealed, and that the laws will turn out to be simple, like the chequer board with all its apparent complexities. But this speculation is of the same nature as those other people make - "I like it," "I don't like it," - and it is not good to be too prejudiced about these things.

**Forstner, Christian**, *The Making of a Genius*, p 10 (in the pdf)

JK: Useful for the sources he cites but poorly rendered into English.

Forstner:

Already incorporated into the first war research, Feynman summarized the results of these works in his dissertation and arrived at the first application of the action principle in quantum mechanics. Feynman described the path to this point more than 20 years later in **a type of dream story**. During the day, he had worked with the German emigrant Herbert Jehle on an article of Dirac, and during the night, Feynman then lay in bed and suddenly saw the solution appear in front of him:

I was lying in bed thinking about this thing, and thought, "What would happen if I wanted to get the wave function at one time, and at finite interval later suppose that the interval was divided into a large number of small steps?... I could represent the coordinates that I was integrating over a succession of positions through which the particle was supposed to go, and then this quantity, this sum, would be like an integral, the integral of L, which is in fact the action... I saw the action expression, suddenly, so to speak... In the air, in the head. Yeah. You see the action coming

on. And I said, ‘My God, that’s the action! Wow!’ I was very excited. So I had filed a new formulation of quantum mechanics in terms of action, directly. I got up and wrote everything out, and checked back and forth, and made sure it was all right, and so on.”

### **Richard Feynman, Lectures on Physics**

[https://www.feynmanlectures.caltech.edu/I\\_toc.html](https://www.feynmanlectures.caltech.edu/I_toc.html)

#### Chapter 8. Motion:

[https://www.feynmanlectures.caltech.edu/I\\_08.html](https://www.feynmanlectures.caltech.edu/I_08.html)

Perhaps you say, “That’s a terrible thing—I learned that in science we have to define *everything* precisely.” We cannot define *anything* precisely! If we attempt to, we get into that paralysis of thought that comes to philosophers, who sit opposite each other, one saying to the other, “You don’t know what you are talking about!” The second one says, “What do you mean by *know*? What do you mean by *talking*? What do you mean by *you*?” and so on. In order to be able to talk constructively, we just have to agree that we are talking about roughly the same thing. You know as much about time as we need for the present, but remember that there are some subtleties that have to be discussed; we shall discuss them later.

#### Chapter 10. Conservation of Momentum

It is worth describing what happens if there are forces that do not come from the mutual actions of the particles in question: suppose we isolate the interacting particles. If there are only mutual forces, then, as before, the total momentum of the particles does not change, no matter how complicated the forces. On the other hand, suppose there are also forces coming from the particles outside the isolated group. Any force exerted by outside bodies on inside bodies, we call an *external* force. We shall later demonstrate that the sum of all external forces equals the rate of change of the total momentum of all the particles inside, a very useful theorem.

JK: Compare the assertion in dialectical materialism that generally changes of a “thing” are based on internal factors/forces (“unity and struggle of opposites”) while external forces of course can also be involved.

The first result from our experiment is that equal objects will have equal speed, but now suppose that we have two objects made of different materials, say copper and aluminum, and we make the two masses equal. We shall now suppose that if we do the experiment with two masses that are equal, even though the objects are not identical, the velocities will be equal. Someone might object: “But you know, you could do it backwards, you did not have to *suppose* that. You could *define* equal masses to mean two masses that acquire equal velocities in this experiment.” We follow that suggestion and make a little explosion between the copper and a very large piece of aluminum, so heavy that the copper flies out and the aluminum hardly budes. That is too much aluminum, so we reduce the amount until there is just a very tiny piece, then when we make the explosion the aluminum goes flying away, and the *copper* hardly budes. That is not enough aluminum. Evidently there is some right amount in between; so we keep adjusting the amount until the velocities come out equal. Very well then—let us turn it around, and say that when the velocities are equal, the masses are equal. This appears to be just a definition, and it seems remarkable that we can transform physical laws into mere definitions. Nevertheless, there *are* some physical laws



involved, and if we accept this definition of equal masses, we immediately find one of the laws, as follows.

JK: This could certainly be interpreted as the dialectic of ideas. You can define things in one way or another, Feynman says. Let's see which suggests other (maybe better) consequences. This seems like the "interpenetration of concepts". Feynman follows this to say that different definitions do lead to different physical laws.

Feynman:

As an interesting example, let us consider an *elastic* collision between two objects of *equal mass*. If they come together with the same speed, they would come apart at that same speed, by symmetry. But now look at this in another circumstance, in which one of them is moving with velocity  $v$  and the other one is at rest. What happens? We have been through this before. We watch the symmetrical collision from a car moving along with one of the objects, and we find that if a stationary body is struck elastically by another body of exactly the same mass, the moving body stops, and the one that was standing still now moves away with the same speed that the other one had; the bodies simply exchange velocities. This behavior can easily be demonstrated with a suitable impact apparatus. More generally, if both bodies are moving, with different velocities, they simply exchange velocity at impact.

JK: Is this dialectical? Yes, the bodies are exchanging velocities.

In Chapter 4 we saw that the law of conservation of energy is not valid unless we recognize that energy appears in different forms, electrical energy, mechanical energy, radiant energy, heat energy, and so on.

JK: Different forms of energy. Can some of them "change into each other"? These lectures certainly demonstrate the "fluidity" of our concepts about matter, their dynamic nature matching the dynamics of matter. In the lecture Feynman shows that via math, energy and mass can be substituted for each other. So the math uses "interchangeability" of the concept (representing material reality) often, and powerfully. Dialectically.

## Chapter 12. Characteristics of Force

The student may object, "I do not like this imprecision, I should like to have everything defined exactly; in fact, it says in some books that any science is an exact subject, in which *everything* is defined." If you insist upon a precise definition of force, you will never get it! First, because Newton's Second Law is not exact, and second, because in order to understand physical laws you must understand that they are all some kind of approximation.

JK: This is in accord with the Marxist idea that we can get closer and closer to (physical, materialist) truth, but it's always an approximation. We don't ever get to the end.

Feynman:

Any simple idea is approximate; as an illustration, consider an object...what is an object? Philosophers are always saying, "Well, just take a chair for example." The moment they say that, you know that they do not know what they are talking about any more. What is a chair? Well, a chair is a certain thing over there...certain? how certain? The atoms are evaporating from it from time to time—not many atoms, but a few—dirt falls on it and gets dissolved in the paint; so to define a chair precisely, to say exactly which atoms are chair, and which atoms are air, or which atoms are dirt, or which atoms are paint that belongs to the chair is impossible. So the mass of a

chair can be defined only approximately. In the same way, to define the mass of a single object is impossible, because there are not any single, left-alone objects in the world—every object is a mixture of a lot of things, so we can deal with it only as a series of approximations and idealizations.

...A mathematical definition will be good for mathematics, in which all the logic can be followed out completely, but the physical world is complex, as we have indicated in a number of examples, such as those of the ocean waves and a glass of wine. When we try to isolate pieces of it, to talk about one mass, the wine and the glass, how can we know which is which, when one dissolves in the other? The forces on a single thing already involve approximation, and if we have a system of discourse about the real world, then that system, at least for the present day, must involve approximations of some kind.

JK: Dialectical: “when one dissolves in the other”.

This principle is known as Hooke’s law, or the law of elasticity, which says that the force in a body which tries to restore the body to its original condition when it is distorted is proportional to the distortion. This law, of course, holds true only if the distortion is relatively small; when it gets too large the body will be torn apart or crushed, depending on the kind of distortion.

JK: An example of quantitative change leading to qualitative change. Further, of destruction of the entity at the extreme.

In the analysis of forces of the more fundamental kinds (not such forces as friction, but the electrical force or the gravitational force), an interesting and very important concept has been developed. Since at first sight the forces are very much more complicated than is indicated by the inverse-square laws and these laws hold true only when the interacting bodies are standing still, an improved method is needed to deal with the very complex forces that ensue when the bodies start to move in a complicated way. Experience has shown that an approach known as the concept of a “field” is of great utility for the analysis of forces of this type.

In spite of how it might at first seem, this separation of one part from another is not a triviality. It would be trivial, just another way of writing the same thing, if the laws of force were simple, but the laws of force are so complicated that it turns out that the fields have a reality that is almost independent of the objects which create them. One can do something like shake a charge and produce an effect, a field, at a distance; if one then stops moving the charge, the field keeps track of all the past, because the interaction between two particles is not instantaneous. It is desirable to have some way to remember what happened previously. If the force upon some charge depends upon where another charge was yesterday, which it does, then we need machinery to keep track of what went on yesterday, and that is the character of a field. So when the forces get more complicated, the field becomes more and more real, and this technique becomes less and less of an artificial separation.

JK: On the complexity of the interaction of particles.

#### Chapter 14. Work and Potential Energy (conclusion)

The reason we bring this out is that the idea of *force* is not particularly suitable for quantum mechanics; there the idea of *energy* is most natural. We find that although forces and velocities “dissolve” and disappear when we consider the more advanced forces between nuclear matter and

between molecules and so on, the energy concept remains. Therefore we find curves of potential energy in quantum mechanics books, but very rarely do we ever see a curve for the force between two molecules, because by that time people who are doing analyses are thinking in terms of energy rather than of force.

JK: With a change of scale (macro to micro/nano), the terminology changes (force to energy), representing the dissolution of some entities (force, velocity) while another (energy) remains. This is dialectical – both the concepts and the underlying realities.

#### Chapter 16. Relativistic Energy and Momentum

JK: Feynman starts out criticizing philosophers for making much of relativity but in a simplistic way. Notes philosophical influences of the theory of relativity. Every idea can be wrong. Strange ideas need only agree with experiment.

Feynman:

Finally, there is a third suggestion which is a little more technical but which has turned out to be of enormous utility in our study of other physical laws, and that is to *look at the symmetry of the laws* or, more specifically, to look for the ways in which the laws can be transformed and leave their form the same.

JK: Feynman says when two objects collide, if at high energy, the new object has greater mass than the rest mass of the previous two objects. Because energy absorption occurs. This is another example of the dynamics (changeability, dialectics) of objects, unlike earlier materialism.

#### Chapter 17. Space-Time

What we mean by “right now” is a mysterious thing which we cannot define and we cannot affect, but it can affect us later, or we could have affected it if we had done something far enough in the past. When we look at the star Alpha Centauri, we see it as it was four years ago; we might wonder what it is like “now.”

...There are fortune tellers, or people who tell us they can know the future, and there are many wonderful stories about the man who suddenly discovers that he has knowledge about the affective future. Well, there are lots of paradoxes produced by that because if we know something is going to happen, then we can make sure we will avoid it by doing the right thing at the right time, and so on. But actually there is no fortune teller who can even tell us the *present!* There is no one who can tell us what is really happening right now, at any reasonable distance, because that is unobservable.

JK: Beg to differ - groups like the Future Forecasting Group have a track record of predicting the future of cryptocurrencies with some accuracy. And, remote viewers have won big and (many) small lotteries.

#### Chapter 19. Center of Mass; Moment of Inertia

Must the laws on a small scale be the same as those on a larger scale? Of course it is not necessarily so in nature, that at an atomic level the laws have to be the same as on a large scale.

...Newton’s laws are the “tail end” of the atomic laws, extrapolated to a very large size. The actual laws of motion of particles on a fine scale are very peculiar, but if we take large numbers of them and compound them, they approximate, but *only* approximate, Newton’s laws.

...As we apply quantum mechanics to larger and larger things, the laws about the behavior of many atoms together do *not* reproduce themselves, but produce *new laws*, which are Newton's laws, which then continue to reproduce themselves from, say, micro-microgram size, which still is billions and billions of atoms, on up to the size of the earth, and above.

JK: The laws vary with the size. As quantity increases, we find a change in quality (new laws).

#### Chapter 22. Algebra

But it turns out that *with this one more invention*, just the square root of  $-1$ , *every algebraic equation can be solved!* This is a fantastic fact, which we must leave to the Mathematics Department to prove.

#### Chapter 26. Optics: The Principle of Least Time

There are no actual boundaries between one range of wavelengths and another, because nature did not present us with sharp edges. The number associated with a given name for the waves are only approximate and, of course, so are the names we give to the different ranges.

JK: In *Materialism and empirio-criticism*, Lenin held that all boundaries in nature are fuzzy, not sharp, and not fixed either.

#### Chapter 38. The Relation of Wave and Particle Viewpoints

When philosophical ideas associated with science are dragged into another field, they are usually completely distorted. Therefore we shall confine our remarks as much as possible to physics itself.

...The problem has been raised: if a tree falls in a forest and there is nobody there to hear it, does it make a noise? A *real* tree falling in a *real* forest makes a sound, of course, even if nobody is there. Even if no one is present to hear it, there are other traces left. The sound will shake some leaves, and if we were careful enough we might find somewhere that some thorn had rubbed against a leaf and made a tiny scratch that could not be explained unless we assumed the leaf were vibrating. So in a certain sense we would have to admit that there is a sound made. We might ask: was there a *sensation* of sound? No, sensations have to do, presumably, with consciousness. And whether ants are conscious and whether there were ants in the forest, or whether the tree was conscious, we do not know. Let us leave the problem in that form.

...The situation in the sciences is this: A concept or an idea which cannot be measured or cannot be referred directly to experiment may or may not be useful. It need not exist in a theory. In other words, suppose we compare the classical theory of the world with the quantum theory of the world, and suppose that it is true experimentally that we can measure position and momentum only imprecisely. The question is whether the *ideas* of the exact position of a particle and the exact momentum of a particle are valid or not. The classical theory admits the ideas; the quantum theory does not. This does not in itself mean that classical physics is wrong.

...When the new quantum mechanics was discovered, the classical people—which included everybody except Heisenberg, Schrödinger, and Born—said: “Look, your theory is not any good because you cannot answer certain questions like: what is the exact position of a particle?, which hole does it go through?, and some others.” Heisenberg's answer was: “I do not need to answer such questions because you cannot ask such a question experimentally.”

JK: Compare Marx, *Theses on Feuerbach* about academic questions -- ones that cannot be answered in practice are...merely speculative.

...The basis of a science is its ability to *predict*. To predict means to tell what will happen in an experiment that has never been done.

JK: Physicist Edwin C. May and Sonali Bhatt Marwaha propose that all psi is precognitive. Psi has certainly been used to successfully predict outcomes (financial, sports events) so at least some psi is precognitive. Whether it all is remains to be decided.

Feynman:

If we have an atom that is in an excited state and so is going to emit a photon, we cannot say *when* it will emit the photon. It has a certain amplitude to emit the photon at any time, and we can predict only a probability for emission; we cannot predict the future exactly. This has given rise to all kinds of nonsense and questions on the meaning of freedom of will, and of the idea that the world is uncertain.

Speaking more precisely, given an arbitrary accuracy, no matter how precise, one can find a time long enough that we cannot make predictions valid for that long a time. Now the point is that this length of time is not very large. It is not that the time is millions of years if the accuracy is one part in a billion. The time goes, in fact, only logarithmically with the error, and it turns out that in only a very, very tiny time we lose all our information. If the accuracy is taken to be one part in billions and billions and billions—no matter how many billions we wish, provided we do stop somewhere—then we can find a time less than the time it took to state the accuracy—after which we can no longer predict what is going to happen! It is therefore not fair to say that from the apparent freedom and indeterminacy of the human mind, we should have realized that classical “deterministic” physics could not ever hope to understand it, and to welcome quantum mechanics as a release from a “completely mechanistic” universe. For already in classical mechanics there was indeterminability from a practical point of view.

JK: Got that?? I’ve read it several times and, well, I get the conclusion but not the reasoning.

Chapter 46. Ratchet and pawl

So far as we know, all the fundamental laws of physics, like Newton’s equations, are reversible. Then where does irreversibility come from? It comes from order going to disorder, but we do not understand this until we know the origin of the order.

The astronomers, for example, have only looked at some of the stars. Every day they turn their telescopes to other stars, and the new stars are doing the same thing as the other stars. We therefore conclude that the universe is *not* a fluctuation, and that the order is a memory of conditions when things started. This is not to say that we understand the logic of it. For some reason, the universe at one time had a very low entropy for its energy content, and since then the entropy has increased. So that is the way toward the future. That is the origin of all irreversibility, that is what makes the processes of growth and decay, that makes us remember the past and not the future, remember the things which are closer to that moment in the history of the universe when the order was higher than now, and why we are not able to remember things where the disorder is higher than now, which we call the future. So, as we commented in an earlier chapter, the entire universe is in a

glass of wine, if we look at it closely enough. In this case the glass of wine is complex, because there is water and glass and light and everything else.

JK: Sounds Bohmian, but “on steroids”. Or like William Blake in *Auguries of Innocence*:

To see a World in a Grain of Sand  
And a Heaven in a Wild Flower  
Hold Infinity in the palm of your hand  
And Eternity in an hour

[Re: an illustration in his lectures:]

If the ratchet and pawl were in a box and isolated for some sufficient time, the wheel would be no more likely to go one way than the other. But because we pull up the shades and let the light out, because we cool off on the earth and get heat from the sun, the ratchets and pawls that we make can turn one way. This one-wayness is interrelated with the fact that the ratchet is part of the universe. It is part of the universe not only in the sense that it obeys the physical laws of the universe, but its one-way behavior is tied to the one-way behavior of the entire universe. It cannot be completely understood until the mystery of the beginnings of the history of the universe are reduced still further from speculation to scientific understanding.

Chapter 50. Harmonics.

We might remark on a third aspect of this very interesting discovery: that the discovery had to do with two notes that *sound pleasant* to the ear. We may question whether *we* are any better off than Pythagoras in understanding *why* only certain sounds are pleasant to our ear. The general theory of aesthetics is probably no further advanced now than in the time of Pythagoras. In this one discovery of the Greeks, there are the three aspects: experiment, mathematical relationships, and aesthetics. Physics has made great progress on only the first two parts. This chapter will deal with our present-day understanding of the discovery of Pythagoras.

...Perhaps we should make the following rules. Notes sound consonant when they have harmonics with the same frequency. Notes sound dissonant if their upper harmonics have frequencies near to each other but far enough apart that there are rapid beats between the two. Why beats do not sound pleasant, and why unison of the upper harmonics does sound pleasant, is something that we do not know how to define or describe. We cannot say from this knowledge of what *sounds* good, what ought, for example, to *smell* good. In other words, our understanding of it is not anything more general than the statement that when they are in unison they sound good. It does not permit us to deduce anything more than the properties of concordance in music.

Chapter 52. Symmetry in Physical Laws.

It is possible to find groups of atoms such that if we change a pair around, it makes no difference—the atoms are identical. Whatever one atom of oxygen of a certain type will do, another atom of oxygen of that type will do. One may say, “That is ridiculous, that is the *definition* of equal types!” That may be merely the definition, but then we still do not know whether there *are* any “atoms of the same type”; the *fact* is that there are many, many atoms of the same type. Thus it does mean something to say that it makes no difference if we replace one atom by another of the same type. The so-called elementary particles of which the atoms are made are also identical particles in the

above sense—all electrons are the same; all protons are the same; all positive pions are the same; and so on.

...But if we look at the individual atoms themselves, the laws look completely reversible. This is, of course, a much harder discovery to have made, but apparently it is true that the fundamental physical laws, on a microscopic and fundamental level, are completely reversible in time!

...The symmetries of the physical laws are very interesting at this level, but they turn out, in the end, to be even more interesting and exciting when we come to quantum mechanics. For a reason which we cannot make clear at the level of the present discussion—a fact that most physicists still find somewhat staggering, a most profound and beautiful thing, is that, in quantum mechanics, *for each of the rules of symmetry there is a corresponding conservation law*; there is a definite connection between the laws of conservation and the symmetries of physical laws. We can only state this at present, without any attempt at explanation.

We might like to turn the idea around and think that the true explanation of the near symmetry of nature is this: that God made the laws only nearly symmetrical so that we should not be jealous of His perfection!

**Feynman**, *The World from another Point of view* (video)(1973)

There's such a lot in the world. There's so much distance between the fundamental rules and the final phenomena that it's almost unbelievable that the final variety of phenomena can come from such a steady operation of such simple rules.

JK: Here too quantitative change leads to qualitative change. From atoms and simple motions to humans (and Feynman refers to both at this point in the video.)

**Feynman**, *Cargo Cult Science*

<http://calteches.library.caltech.edu/51/2/CargoCult.htm>

Talks about J.B. Rhine's experiments. Uri Geller demonstrated but failed. Feynman does not outright say, though, that psi is non-existent. He leaves it open, since he says he doesn't know.

**Amazon reader review:** If you know nothing about Feynman, start by watching a couple of the BBC videos of him, so you get a sense of his voice, accent, mannerisms, and infectious interest in science. Then, with that imprinted, read "Surely You're Joking..." and after that move on to his "Lectures on Physics." You will then know enough to tackle his other available work. If you still have an appetite for the man behind the scientist, read Gleick's bio or the selection of his letters that his daughter edited. Mlodinow may have an interesting story to tell about his life, but not in this fashion.

## **Appendix 10 About the author / compiler**

We have seen what many great (and a few not so great!) figures have thought and done with regard to the deep issues that life -- and philosophy -- present. I have intermixed my comments with extracts throughout the Sourcebook along with a little autobiographical information. I take the liberty here of describing the environments in which I was raised, the people and experiences that have shaped my thoughts in philosophy and my practice when I was involved in trying to make revolutionary change.

Some years ago I wrote an autobiography covering the years from my birth in 1938 to 1974 when the Travis Air Force Base anti-war project I was involved with ended. I didn't publish the autobio, not even self-publish. In this appendix, I revisit formative experiences from the 1940s through early 1970s.

My mother and father were both born in 1910. They were members of "The Greatest Generation" -- those who lived through the Great Depression and World War II. As a child, I and my peers in the so-called "Silent Generation" were raised against a background of the extreme stresses and vicissitudes that our parents lived through. Both of my parents were in the thick of it -- my father as a Unitarian minister turned Communist labor organizer and my mother as a "Commie librarian" who was fired from her job and summoned by the Senate Internal Security Subcommittee.

We moved a lot -- from Watertown, Massachusetts to Goose Creek, Texas and I attended many primary schools (though not in either of those towns)! This was in the early 1940s as World War II raged. As I grew up my mother and I often lived with other families since for several years my father was at sea in the Merchant Marines in the very dangerous North Atlantic runs. Amazingly and fortunately, he survived the U-boats, but the marriage did not.

Before he was at sea, my father, mother and I lived for a time with one of my father's closest college friends, Jim Balano in Gloucester, Massachusetts. I started school there and made a close friend in first grade. When I learned we were going to have to move again, my friend and I were quite upset. That led to my being hesitant to form close friendships at school, since we moved so much and leaving a friend at a tender age was very hard!

The Arnolds were another family we lived with. We shared a very old house in 1945-46 in Weston, just outside of Boston, Massachusetts. The large rambling structure had a hidden compartment for runaway slaves, right under the front stairs; it had been a stop in the Underground Railroad. The father was Leslie, the mother was Henriette and Judy and Seth were the children, both older than I. Leslie was a socialist and the person who introduced my father to Marxism. He looked a bit like Nietzsche -- and was a terrible chess player. After losing a few games, he refused to play with me anymore. As a 7-year-old I didn't know why, but as with so many things in childhood, you accepted it -- that's just the way it was. These were the days of War Bonds, ration books, adults rolling their cigarettes, and double daylight savings time. It was very dark when we went to school, but light in the evening so we had time to till the "Victory Garden". At school we were shown black and white newsreels that tracked Allied progress in "the war". We listened to moving records of Paul Robeson and uplifting songs about the Red Army. Stalin was "Uncle Joe" and Franklin Delano Roosevelt was God.



After leaving Weston, in 1948 my mother and I moved to the home of the Winner family in Malden, Mass, also very close to Boston. During this time my father was still at sea and my parents divorced. Harry Winner was the father, Irene the mother and the kids were Arthur and Jeannie. Harry was a self-taught intellectual -- he even had an entire room just for his books - thousands of them! Imagine that! Harry was brilliant, warm and witty. He ran the cafeteria at the Converse shoe factory and brought us Converse sneakers to wear. Harry took the family to every single Gilbert and Sullivan operetta that the D'Oyly Carte Opera Company performed in Boston. At age 10 I told him my favorite composer was Mendelssohn -- he replied that as I grew older I would prefer Mozart. (He was wrong.) He was the first intellectual I'd met - outside my father and mother - who was willing to talk to kids. (Leslie Arnold was not.)

After living with the Winners for two years, my mother and I moved to an apartment in Norwood, Mass. Pretty much every weekend my mother and I would be picked up by my Auntie Dot in her car (we didn't have one) and we would spend the weekend with her and her two daughters, Janet and Neila, in their very large home in Watertown, Massachusetts. The father, Neil Tillotson, was never there. Many years later I learned he secretly had another family -- he was always "at the factory". He became a tycoon by being the first to manufacture balloons for kids. My aunt turned out to be a Nixon Republican in later years. She had studied Russian as a youth; perhaps the Russian revolution influenced her. I never learned why she did.

In 1953 Herbert Philbrick of "I Led 3 (Three) Lives" [for the FBI] fingered my mother and she was fired from her job as a librarian in Norwood. We moved to Pennsylvania at the invitation of a woman named Brock Whitney, whom my parents had known in Weston. Brock was also divorced and had three kids. She generously invited us to live with her in her house in Wayne, PA, on the Main Line. So I spent my high school years in Brock's home with daughters Molly, who was my age, and Carol, who was a little older. There was a son, Jim, but he was away at college. Brock was quite intellectual and had married Hassler Whitney, a brilliant mathematician who was at the Institute for Advanced Studies in Princeton, New Jersey.

One day Brock said to me out of the blue, "All knowledge is error!" My immediate reply was, "It can't all be error or we'd never get anywhere." She was pleased with this answer. Much later I realized my reply was in accord with the Marxist approach. We obtain objective knowledge through dialectical trial and error and as we do so move closer to truth. Brock and all of the adults I've mentioned were either Communists or independent socialists, so socialism and communism were in their thoughts, but none of them, including my parents, ever mentioned Marxism or socialism to me. They were trying to protect us. If someone asked, I was to tell people that my father worked in "public relations". He was in fact a member of the Communist Party and had left his position as a Unitarian Minister in Gardner, Massachusetts (where I was born) to become a very skilled and hard-nosed labor organizer for the CIO. Since I wasn't indoctrinated, I consider myself to be a "pink diaper baby" rather than a red one.

After graduating from high school, I spent four years at Harvard (1956-1960) with extremely bright students from across the country. I was a "wonk," a term for those of us who went to public high school. The other group (the preppies) consisted of those who had gone to elite prep schools like Andover and Exeter. I was busy trying to keep my head above water, struggling with the huge

amounts of material we were assigned and working two part-time jobs. I missed out on the progressive/left activities that some of my friends in college were taking part in (as I later learned). I majored in philosophy but there was only one course that dealt with Marxism -- a subject I wanted to learn about. It was taught by a visiting professor -- I guess no one at Harvard would touch it. W.V.O. Quine was then a leading light in the department and analytic philosophy ruled.

From August 22, 1961 to August 21, 1963 -- a soldier remembers his exact dates of enlistment and discharge! -- I was in the US Army, thanks to a draft notice from President John F. Kennedy. I got to experience what the "peacetime military" was all about. I was assigned to a missile battalion in Germany. The Army had the clearest class structure you could imagine: officers and enlisted were defined by bars or stripes on their uniform, and you knew your precise status every minute of the day, as you saluted every officer you came across.

After discharge from the Army, I traveled to Israel and spent four months working in orchards on a kibbutz in the fall of 1963. It was a socialist kibbutz at that, Mishmar Ha'emek. There were pictures of Marx and Engels on the walls of the kids' dorm. There were socialists aplenty there but since they spoke Hebrew, my exposure to their views was limited to our relatively few conversations in English. I did learn that they were appalled that the Soviet Union was still importing wheat 45 years after the revolution. Also that there was anti-Semitism in the Socialist Motherland of Lenin and Stalin.

Back in the States, I was arrested in the Free Speech Movement in Berkeley in the fall of 1964 and after two years in graduate school there, I received an M.A. in English literature. I moved to San Diego, taught at San Diego State for a year, then I "dropped out." I lived in Mexico City for several months learning Spanish and then returned to Berkeley where I became a very square hippie. I lived in a house that the local PG&E guy said was the "farthest out" of all he'd seen around town. This was the height of the hippie era so that was quite an honor! What was so far out? Well, for one thing we had a table in our living room with a rotating top with a map of Berkeley painted on it. The houses where you could score marijuana, hashish or LSD were marked. We did smoke a lot of pot and hashish, and I tried mescaline. Then too we had a bearded young man living under the house who professed to be Jesus. It was that kind of place and time. The Vietnam War was raging and I took part in many anti-war demonstrations. At the same time I started practicing Zen meditation. The mescaline, hash and marijuana took me to places I'd never been. I have to say that both of them not only distorted but helped open my mind.

I hope the above sheds light on an environment that fostered the views and beliefs I came to. Not much of it correlates directly with philosophical positions, but it's clear I gravitated to the mindset of my parents and their Leftist peers. And living with so many different people, particularly the socialists and communists in those wild times, colored my understanding of the world and even my perceptions of reality -- getting high in Berkeley and on the amazing weed in Hong Kong where I lived from 1969-1971 teaching English.

I end by noting that I haven't said more about my 20 years in the party-building movement (discussed in Appendixes 3 and 4) nor my many happy years of marriage and raising a family. Perhaps I will in a subsequent appendix.

I conclude with mention of four books, two which have details about my upbringing and two about my primary interest for the past 24 years.

1. Clive Knowles, *Passing Through: A Yankee Radical's Journey* (2022)

<https://www.amazon.com/Passing-Through-Yankee-Radicals-Journey/dp/1943951381>

My father's autobiography - a very remarkable life in extraordinary times.

2. Allison Hepler, *McCarthyism in the Suburbs: Quakers, Communists, and the Children's Librarian* (2018)

<https://scholarworks.umf.maine.edu/publications/30/>

<https://rowman.com/ISBN/9781498569392/McCarthyism-in-the-Suburbs-Quakers-Communists-and-the-Childrens-Librarian>

<https://www.amazon.com/McCarthyism-Suburbs-Communists-Childrens-Librarian/dp/1498569390>

A book about my mother's life and the courageous stand she and her allies took during the McCarthy years.

3. My two books about remote viewing

*Remote Viewing from the Ground Up* (2017)

<https://tinyurl.com/yhdcxsx2>

*Associative Remote Viewing: The Art & Science of Predicting Outcomes for Sports, Politics, Finances and the Lottery* (2021)(coauthor Debra Lynne Katz)

<https://tinyurl.com/2423uj3c>

## Bibliography

The bibliography lists the books, articles, pdfs, web sites, and videos utilized or referred to the Sourcebook. Many links are provided, for easier access to the text. Some of the books, articles and pieces are downloadable, some are not. As we turn more and more to online materials, the particular publishing house is less important and so I have not always included the publisher. One advantage of the pdf format rather than a print version is that if a link goes bad or any other error is found, corrections are easy to make.

Adams, Adams, *Adventures in Remote Viewing* (web site)

<https://www.adventuresinremoteviewing.com/>

Adorno, Theodor, *Negative Dialectics* (1966)

<https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100227235>

Althusser, Louis Pierre

[https://en.wikipedia.org/wiki/Louis\\_Altusser](https://en.wikipedia.org/wiki/Louis_Altusser)

Althusser, Louis, *On Marxism, Note on Dialectical Materialism* (1953)

<https://www.marxists.org/reference/archive/althusser/index.htm>

Althusser, Louis, *For Marx* (1962)

<http://www.marx2mao.com/Other/FM65i.html>

Althusser, Louis, *Lenin before Hegel* (1969)

<http://www.marx2mao.com/Other/FM65i.html>

Althusser, *Lenin before Hegel, Notes* - a note by Lenin (1969)

<https://www.marxists.org/reference/archive/althusser/1969/lenin-before-hegel.htm>

Althusser, *Lenin and Philosophy* (1971)

<https://www.marxists.org/reference/archive/althusser/1968/lenin-philosophy.htm>

Althusser, Louis, *Letter to Merab Mamardachvili* (1978)

<https://www.marxists.org/reference/archive/althusser/1978/mamardachvili.htm>

Amilcar Cabral/Paul Robeson Collective (AC/PRC), *Notes from the MultiLateral conference* (Summer 1979)

<https://marxists.catbull.com/history/erol/nem-5/mulc-notes.pdf>

Andersen, Kevin, review of his *Centrality of Dialectics* (2022)

<https://newpol.org/review/the-centrality-of-dialectics-in-marxist-theory-and-politics/>

<http://isj.org.uk/dialectics-liberation/>

Angus, Ian, *Marx and Engels and the Red chemist, The Forgotten Legacy of Karl Schorlemmer* (2017)

<https://climateandcapitalism.com/2017/03/21/marx-and-engels-and-the-red-chemist/>

Aristotle, *Metaphysics, Book IV, part 3*  
<http://classics.mit.edu/Aristotle/metaphysics.4.iv.html>

Aristotle, *Metaphysics, Book IV, part 7*  
<http://classics.mit.edu/Aristotle/metaphysics.mb.txt>

Atunrase, Tunde, *Remote Viewing - UFOs and the Visitors: Where do they come from? What are they? Who are they? Why are they here?* (2015)  
<https://www.amazon.com/Remote-Viewing-UFOs-VISITORS-Where/dp/1512115444>

Bergson, Henri, *The Creative Mind: An Introduction to Metaphysics* (1903-1923)  
<https://archive.org/details/in.ernet.dli.2015.223138>

Becker, Marc, *Mariátegui and Latin American Marxist Theory* (1993)  
<https://www.amazon.com/Mariategui-American-Marxist-Research-International/dp/0896801772>

Bernal, John Desmond  
[https://en.wikipedia.org/wiki/J.\\_D.\\_Bernal](https://en.wikipedia.org/wiki/J._D._Bernal)

Bernal, J.D., *The world, the flesh and the Devil* (1929).  
<https://www.marxists.org/archive/bernal/works/1920s/soul/>

Bernal, J.D., *Dialectical Materialism and Modern Science* (1937), *Science and Society, Volume II, No. 1, Winter 1937*.  
<https://www.marxists.org/archive/bernal/works/1930s/dsams.htm>

Blunden, Andy, *Vygotsky and the Dialectical Method* (1997)  
<https://www.marxists.org/archive/vygotsky/works/comment/vygotsk1.htm>

Bohm, David Joseph  
[https://en.wikipedia.org/wiki/David\\_Bohm](https://en.wikipedia.org/wiki/David_Bohm)

Bohm, David, *Wholeness and the implicate order* (1980)  
<http://www.gci.org.uk/Documents/DavidBohm-WholenessAndTheImplicateOrder.pdf>

Bohm, David, *A new theory of mind and matter* (1990)  
[https://web.archive.org/web/20051223092101id\\_/http://philosophy.tamu.edu:80/~j-oneal/PSSem/BMM.pdf](https://web.archive.org/web/20051223092101id_/http://philosophy.tamu.edu:80/~j-oneal/PSSem/BMM.pdf)

Bohr, Niels, *Discussions with Einstein on Epistemological Problems in Atomic Physics* (1949)  
<https://www.marxists.org/reference/subject/philosophy/works/dk/bohr.htm>

Born, Max  
[https://en.wikipedia.org/wiki/Max\\_Born](https://en.wikipedia.org/wiki/Max_Born)

Bukharin, Nikolai Ivanovich

[https://en.wikipedia.org/wiki/Nikolai\\_Bukharin](https://en.wikipedia.org/wiki/Nikolai_Bukharin)

Bukharin, Nikolai, *Historical Materialism a System of Sociology. Materialism and Idealism in Philosophy; the Problem of the Objective* (1925)

<https://www.marxists.org/archive/bukharin/works/1921/histmat/3.htm>

Cabral, Amilcar, *Connecting the Struggles, an informal talk with Black Americans*, Oct 20, 1972

[https://abahlali.org/wp-content/uploads/2016/12/amilcar\\_cabral\\_return\\_to\\_the\\_source-ilovepdf-compressed.pdf](https://abahlali.org/wp-content/uploads/2016/12/amilcar_cabral_return_to_the_source-ilovepdf-compressed.pdf)

Campbell, Ben, *Dialectics in Science: An interview with Helena Sheehan* (December 15, 2012)

<https://climateandcapitalism.com/2012/12/15/dialectics-in-science-an-interview-with-helena-sheehan/>

Central Intelligence Organization (CIA), Freedom of Information Act Electronic Reading Room. [Star Gate is the name used to describe the entire 1975-1995 US government remote viewing project.]

<https://www.cia.gov/readingroom/collection/stargate>

Central Organization of US Marxist-Leninists (COUSML), *Dialectics of the development of Nelson Perry's Head. A Refutation of the Counter-Revolutionary Line of the So-called "Communist League"* (June 1974)

<https://www.marxists.org/history/erol/ncm-2/perry-head.htm>

Carneiro, Robert L. *The transition from quantity to quality: A neglected causal mechanism in accounting for social evolution*. Sep 28, 2000, American Museum of Natural History, New York

<https://www.pnas.org/doi/full/10.1073/pnas.240462397>

Chalmers, David John

[https://en.wikipedia.org/wiki/David\\_Chalmers](https://en.wikipedia.org/wiki/David_Chalmers)

Chalmers, David, *Consciousness and its Place in Nature* (2003)

<https://consc.net/papers/nature.pdf>

Chan-Wyles, Adrian, note on Engels' *Anti-Dühring*

<https://buddhistsocialism.weebly.com/wolf-grigorevich-messing-1899-1974---soviet-telepath.html>

China Daily, "*New Contradiction*" keeps pace with times (October 22, 2017)

[http://www.chinadaily.com.cn/china/19thcpnationalcongress/2017-10/22/content\\_33556562.htm](http://www.chinadaily.com.cn/china/19thcpnationalcongress/2017-10/22/content_33556562.htm)

Chomsky, Noam - on postmodernism

[http://anti-dialectics.co.uk/page%2009\\_02.htm#Note%2031a](http://anti-dialectics.co.uk/page%2009_02.htm#Note%2031a)

See also: <http://bactra.org/chomsky-on-postmodernism.html>  
<https://www.youtube.com/watch?v=OjQA0e0UYzI&t=20s>

Clapp, Robin, *Introducing Marxism - Dialectical Materialism* (2022)  
<https://socialismtoday.org/introducing-marxism-dialectical-materialism>

Clark, Andy and Chalmers, David, *Extended Mind* (1987)  
<https://www.alice.id.tue.nl/references/clark-chalmers-1998.pdf>  
<https://www.jstor.org/stable/3328150>

Clarke, Richard, *What can a Marxist approach tell us about science?* (2017)  
<https://www.culturematters.org.uk/index.php/culture/science/item/2676-what-can-a-marxist-approach-tell-us-about-science> 27 November 2017

Committee for a Proletarian Party, Former Members, *In Defense of Mao Tsetung's Contributions to Materialist Dialectics* (1975)  
<https://www.marxists.org/history/erol/ncm-5/cpp-mao/section-1.htm>

Reprinted in:

<https://reconstructioncommunism.wordpress.com/2015/09/15/in-defense-of-mao-tsetungs-contributions-to-materialist-dialectics/>

and in: <https://tamilmarxism.blogspot.com/2018/08/dialectics-mao-and-hegel-differing.html>

Communist Federation of Britain (Marxist-Leninist), *The Principal Contradiction in the Organization* (1977)  
<https://www.marxists.org/history/erol/uk.secondwave/principal-contradiction.pdf>

Communist League, *Dialectics of the Development of the Communist League* (1972)  
<https://www.marxists.org/history/erol/ncm-1/ccl-dialectics.htm>

Communist Orientation (Denmark), on the principal contradiction (1975)  
<https://www.marxists.org/history/erol/denmark/cwc-contradiction.pdf>

Communist Party of China, *Resolution on certain questions in the history of our party since the founding of the People's Republic of China* (Adopted by the Sixth Plenary Session of the Eleventh Central Committee of the Communist Party of China on June 27, 1981)  
<https://www.marxists.org/subject/china/documents/cpc/history/01.htm>

Communist Workers Party, *Study Marxist Philosophy* (1980)  
<https://www.marxists.org/history/erol/ncm-5/cwp-essence.htm>

Coombs, Nathan, *Rejecting both Mao and Deng: Slavoj Žižek and Waiting for the Leftist Critique to Come*. *International Journal of Žižek Studies*, Vol 2, No. 2. 2008  
<http://zizekstudies.org/index.php/IJZS/issue/view/8>

DeGenova, N. *Toward a Marxian Anthropology*, from *Dialectical Anthropology* (2016)  
<https://www.springer.com/journal/10624>

Dialectics for Kids (web site)  
<https://dialectics4kids.org/>

Dialectical Materialism For Dummies (web site)  
[https://www.reddit.com/r/socialism/comments/j0cufz/dialectical\\_materialism\\_for\\_dummies](https://www.reddit.com/r/socialism/comments/j0cufz/dialectical_materialism_for_dummies)

Dong Shen, Run-Sheng Shen, Gang Li, *Laboratory Investigations of Extrasensory Identification of Concealed 5-Character Codes by a Presumably Gifted Teenager in China*, *Journal of Scientific Exploration*, Vol. 35, No. 3, pp. 570–589, 2021  
<https://journalofscientificexploration.org/index.php/jse/article/view/1827>

Ebon, Martin, *Psychic Warfare: Threat or Illusion?* (1983)  
[https://archive.org/details/Psychic\\_Warfare\\_Threat\\_or\\_Illusion\\_Ebon\\_Martin](https://archive.org/details/Psychic_Warfare_Threat_or_Illusion_Ebon_Martin)  
<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=9cc65605ff582af76bebad3d0534315af45bb8fa>  
[https://archive.org/stream/Psychic\\_Warfare\\_Threat\\_or\\_Illusion\\_Ebon\\_Martin/Psychic\\_Warfare\\_Threat\\_or\\_Illusion\\_Ebon\\_Martin\\_djvu.txt](https://archive.org/stream/Psychic_Warfare_Threat_or_Illusion_Ebon_Martin/Psychic_Warfare_Threat_or_Illusion_Ebon_Martin_djvu.txt)

Einstein, Albert and Infeld, Leopold, *Evolution of Physics*, Cambridge University Press (1938)  
<https://ia600202.us.archive.org/0/items/evolutionofphysi033254mbp/evolutionofphysi033254mbp.pdf>

Einstein, Albert - reply to Bohr (1949)  
<https://www.marxists.org/reference/subject/philosophy/works/ge/einstein.htm>

Elbaum, Max, *Revolution in the Air* (2002)  
<https://www.penguinrandomhouse.com/books/233053/revolution-in-the-air-by-max-elbaum/>  
<https://z-lib.io/author/Max%20Elbaum>

Elizondo, Lue - UFO disclosure advocate, on revising our understanding of human history  
<https://app.podscribe.ai/episode/93750460>

Engels, Friedrich, *Anti-Dühring, Part I: Philosophy, XIII. Dialectics. Negation of the Negation* (1877)  
<https://www.marxists.org/archive/marx/works/1877/Anti-Dühring/ch11.htm>

Engels, Friedrich, *Socialism: Utopian and Scientific* (1880)  
<https://www.marxists.org/archive/marx/works/1880/soc-utop/>

Engels, Friedrich, *Dialectics of Nature* (1883)  
<https://www.marxists.org/archive/marx/works/1883/don/ch02.htm>

Engels, Friedrich, *Dialectics of Nature. Notes and Fragments* (1883)



<https://www.marxists.org/archive/marx/works/1883/don/ch07c.htm>

Engels, Friedrich, *Ludwig Feuerbach and the End of Classical German Philosophy* (1886)

<https://www.marxists.org/archive/marx/works/1886/ludwig-feuerbach/ch02.htm#:~:text=The%20great%20basic%20question%20of,relation%20of%20thinking%20and%20being>

Feynman, Richard, *Cargo Cult Science* (1974)

<http://calteches.library.caltech.edu/51/2/CargoCult.htm>

Feynman, Richard - on definitions

[https://bobsutton.typepad.com/my\\_weblog/2011/09/richard-feynman-on-the-fooly-of-crafting-precise-definitions.html](https://bobsutton.typepad.com/my_weblog/2011/09/richard-feynman-on-the-fooly-of-crafting-precise-definitions.html)

Feynman, Richard - and Quantum Mechanics (Appendix 9)

[https://en.wikipedia.org/wiki/Interpretations\\_of\\_quantum\\_mechanics](https://en.wikipedia.org/wiki/Interpretations_of_quantum_mechanics)

Feynman, Richard, *Lectures on Physics* (1961-1964)

[https://www.feynmanlectures.caltech.edu/I\\_toc.html](https://www.feynmanlectures.caltech.edu/I_toc.html)

[https://www.feynmanlectures.caltech.edu/I\\_08.html](https://www.feynmanlectures.caltech.edu/I_08.html)

Feynman, Richard, *The World from another Point of view* (1973 video)

<https://www.youtube.com/watch?v=GNhINSLQAFE>

Forstner, Christian, *Dialectical Materialism and the Construction of a New Quantum Theory: David Joseph Bohm, 1917–1992* (2005)

<https://www.mpiwg-berlin.mpg.de/sites/default/files/Preprints/P303.pdf>

Forstner, Christian, *The Making of a Genius*, p 10 - on Richard Feynman (2012)

<https://arxiv.org/ftp/arxiv/papers/1208/1208.0215.pdf>

Freire, Olival and Lehner, Christoph, *Dialectical Materialism and Modern Physics, an Unpublished Text By Max Born* (2010)

[https://www.researchgate.net/publication/250902668\\_'Dialectical\\_materialism\\_and\\_modern\\_physics'\\_An\\_unpublished\\_text\\_by\\_Max\\_Born](https://www.researchgate.net/publication/250902668_'Dialectical_materialism_and_modern_physics'_An_unpublished_text_by_Max_Born)

Future Forecasting Group, Dick Allgire - Remote viewing-UFO videos (c. 2020-2024)

<https://www.youtube.com/@FutureForecastingGroup>

Edward Riordan.

<https://www.youtube.com/@erviewer/videos>

Nyam Vendryes

<https://www.youtube.com/@Nyiamtv/videos>

Gallagher, Shaun, *Socially Extended Mind* (2013)

[https://www.researchgate.net/publication/228420473\\_The\\_socially\\_extended\\_mind](https://www.researchgate.net/publication/228420473_The_socially_extended_mind)

Gieser, Suzanne, *Pascual Jordan, The Innermost Kernel: Depth Psychology and Quantum Physics* (2004)

<http://download.e-bookshelf.de/download/0000/0093/47/L-G-0000009347-0002342611.pdf>

Gliniecki, Ben, *Quantum physics, dialectics and society: from Marx and Engels to Khrennikov and Haven* (2013)

<https://www.marxist.com/quantum-society.htm>

Griffin, David Ray - and parapsychology

<http://www.anthoniflood.com/griffinparapsychology.htm>

Groisman, Bery - on Karl Popper (pdf)

<http://philsci-archive.pitt.edu/3980/>

Hajdu, Henni, RV Projects Hungary (web site)

<https://www.rvprojects.hu/>

Haldane, John Burdon Sanderson

[https://en.wikipedia.org/wiki/J.\\_B.\\_S.\\_Haldane](https://en.wikipedia.org/wiki/J._B._S._Haldane)

Haldane, J.S. (father of JBS Haldane), *Materialism* (1932)

<https://archive.org/details/materialism0000hald/page/n5/mode/2up>

Haldane, J.B.S., *The Marxist Philosophy and the Sciences* (1939)

<https://www.marxists.org/archive/haldane/works/1930s/philosophy.htm>

Harcourt, Bernard e., Introduction to Sartre's *Critique of Dialectical Reason* (1960)

<https://blogs.law.columbia.edu/critique1313/bernard-e-harcourt-introduction-to-sartres-critique-of-dialectical-reason-1960/?cn-reloaded=1>

Hegel, Georg F.W. Definitions of dialectics, examples in nature and much more

<https://www.marxists.org/reference/archive/hegel/help/sampler.htm>

Hein, Simeon Hein - UFO reporting (50+ videos), Crop Circles, Multiverses

<https://www.youtube.com/@Fractalfriend/search?query=ufo>

Hepler, Allison, *McCarthyism in the Suburbs: Quakers, Communists, and the Children's Librarian* (2018) - a book about the present author's mother, Mary Ruth Gardner Knowles

<https://scholarworks.umf.maine.edu/publications/30/>

<https://rowman.com/ISBN/9781498569392/McCarthyism-in-the-Suburbs-Quakers-Communists-and-the-Childrens-Librarian>

<https://www.amazon.com/McCarthyism-Suburbs-Communists-Childrens-Librarian/dp/1498569390>

Heterodoxology, *Parapsychology in Germany – review of Heather Wolfram's Stepchildren of Science* (2009)

<https://heterodoxology.com/2012/07/17/parapsychology-in-germany-review-of-heather-wolfframs-stepchildren-of-science-2009/#more-1296>

Hill, Scott, *Renaissance of Parapsychology* at a conference in Kazakh Soviet Republic (1976)  
<https://www.cia.gov/readingroom/document/cia-rdp96-00787r000500030004-2>

Hui, Elaine and Friedman, Eli, *The Communist Party vs. China's Labor Laws*, Jacobin, October 2, 2018  
<https://www.jacobinmag.com/2018/10/china-communist-party-labor-law-jasic>

International Remote Viewing Association (IRVA)(web site)  
<https://www.irva.org/>  
<https://www.irva.org/library/bibliography>

Ivanova, Veneta T., *Occult Communism: Culture, Science and Spirituality in Late Socialist Bulgaria* (Dissertation 2017); *Chapter 4: Dunov, Peter, White Brotherhood: Occultism and Communism In Twentieth-Century Bulgaria*  
[https://www.google.com/books/edition/Occult\\_Communist\\_Culture\\_Science\\_and\\_Spi/aFQywAEACAAJ?hl=en](https://www.google.com/books/edition/Occult_Communist_Culture_Science_and_Spi/aFQywAEACAAJ?hl=en)

Ivanova, Veneta T., *Chapter 2: Occult Communism in Praxis: Aesthetics, Spirituality and Utopia. Chapter 3: From Occultism to Science: Suggestology and Parapsychology Under Communism*

Jackson, T.A. - Communist Party, Great Britain  
<https://www.marxists.org/archive/jackson-ta/1936/dialectics/index.htm>

Jacobsen, Anja Skaar, *Léon Rosenfeld's Marxist defense of complementarity* (2012)  
<https://www.jstor.org/stable/10.1525/hsps.2007.37.s.3>

Jameson, Fredric, *Representing Capital* (2011)  
<https://files.libcom.org/files/Representing%20Capital.pdf>

Joravsky, David, *Soviet Marxism and natural science 1917–1932* (1961)  
<https://ebin.pub/soviet-marxism-and-natural-science-19171932-9780231891035.html>

Jordan, Pascual,  
[https://en.wikipedia.org/wiki/Pascual\\_Jordan](https://en.wikipedia.org/wiki/Pascual_Jordan)

Jordan, Pascual, *The Discovery of Atoms*; excerpt from *Science and the Course of History*, pp 22-32 (1954)  
<https://www.informationphilosopher.com/solutions/scientists/jordan/>

Jordan, Pascual, *Atoms and Organisms* (1954)  
<https://www.informationphilosopher.com/solutions/scientists/jordan/>

Josephson, Paul R., *Physics and politics in revolutionary Russia* (1991), 204, 226, 249.  
<https://dokumen.pub/physics-and-politics-in-revolutionary-russia-reprint-2019nbsped-9780520911475.html>

Kaku, Michio, *Hyperspace*, Oxford University Press, 1994, p 212 (dialectics of water)  
<https://www.unariunwisdom.com/wp-content/uploads/2016/01/Michio-Kaku-Hyperspace-Book.pdf>

Katz, Debra Lynne

Web site: <https://www.debrakatz.com/debrakatzbio>

Books: <https://www.debrakatz.com/books>

Research: <https://www.debrakatz.com/projects-2>  
<https://debralynnekatz.academia.edu/research#papers>

Videos: [https://www.youtube.com/results?search\\_query=debralynneKatz](https://www.youtube.com/results?search_query=debralynneKatz)

Katz, Debra Lynne, *You Are Psychic* (2004)

<https://www.amazon.com/You-Are-Psychic-Clairvoyant-Reading/dp/0989094170>

Katz, Debra Lynne and Knowles, Jon, *Associative Remote Viewing: The Art & Science of Predicting Outcomes for Sports, Politics, Finances and the Lottery* (2021)

<https://tinyurl.com/2423uj3c>

<https://www.arvbook.com/>

Khokhlov, Nikolai, *The Relationship of Parapsychology to Communism*. Paper presented to the Foundation for Research on the Nature of Man on September 1, 1966.

Kiddle - encyclopedia for kids, entries on dialectics and Marxism (web site)

<https://kids.kiddle.co/>

Kulagina, Nina - objects move without being touched (video)

<https://consensus.co.uk/debates-archive/the-woman-who-could-move-objects-with-her-mind/>

Kautsky, Karl - on dialectics

<https://www.marxists.org/archive/kautsky/1927/abstract/mch-abs.htm>

Knight, Nick, *Mao Zedong on Dialectical Materialism: Writings on Philosophy* (1937)

<https://massline.org/Philosophy/Others/Knight-Mao-NegOfNeg.pdf>

Knowles, Clive, *Passing Through: A Yankee Radical's Journey* (2022)

<https://www.amazon.com/Passing-Through-Yankee-Radicals-Journey/dp/1943951381>

Knowles, Jon (web site)

<https://www.jonknowles8.com/>

Knowles, Jon, *What are "Left" and Right Errors* (1976)

<https://www.marxists.org/history/erol/ncm-8/left-right.pdf>

Knowles, Jon, *Remote Viewing from the Ground Up* (2017)

<https://tinyurl.com/yhdcxsx2>

<https://www.amazon.com/Remote-Viewing-Ground-Jon-Knowles/dp/1546702156>

Knowles, Jon and Katz, Debra Lynne, *Associative Remote Viewing: The Art & Science of Predicting Outcomes for Sports, Politics, Finances and the Lottery* (2021)

<https://tinyurl.com/2423uj3c>

<https://www.arvbook.com/>

Knowles, Jon and Smith, Daz, *Remote Viewing Unidentified Phenomena in the USA and Russia*. Nexus magazine, July-August 2023.

<https://nexusmagazine.com/product/volume-30-number-4-downloadable/?v=7516fd43adaa>

Koi, Isaac - large collection of UFO documents (web site)

<https://www.isaackoi.com/>

<https://www.abovetopsecret.com/forum/thread1074447/pg1>

Kovel, Joel, *Red Hunting in the Promised Land* (1997)

<https://store.iww.org/shop/red-hunting-in-the-promised-land/>

Last, Cadell, *A Reflective Note for Dialectical Thinkers*, *International Journal of Žižek studies*, Vol. 12, No. 4. (2018)

<https://zizekstudies.org/index.php/IJZS/article/view/1096>

Laurikainen, K.V., *Wolfgang Pauli's Beyond the Atom: The Philosophic Thought of Wolfgang Pauli* (1988)

[https://books.google.com/books?id=QjLvCAAQBAJ&printsec=frontcover&dq=wolfgang+pauli+parapsychology&hl=en&newbks=1&newbks\\_redir=0&sa=X&ved=2ahUKEwifoo\\_u1fPnAhWKpp4KHVvHDYAQ6AEwBHoECAEQAg#v=onepage&q=wolfgang%20pauli%20parapsychology&f=false](https://books.google.com/books?id=QjLvCAAQBAJ&printsec=frontcover&dq=wolfgang+pauli+parapsychology&hl=en&newbks=1&newbks_redir=0&sa=X&ved=2ahUKEwifoo_u1fPnAhWKpp4KHVvHDYAQ6AEwBHoECAEQAg#v=onepage&q=wolfgang%20pauli%20parapsychology&f=false)

League of Revolutionary Struggle (Marxist-Leninist) (LRS), Congress Papers #4, *An Essay on Dialectics - A "Revolutionary" Proposal Without a Revolutionary Theory*

<https://www.marxists.org/history/erol/ncm-7/lrs-last-congress-4/lrs-4-10.htm>

Lenin (Vladimir Ilyich Ulyanov)

[https://en.wikipedia.org/wiki/Vladimir\\_Lenin](https://en.wikipedia.org/wiki/Vladimir_Lenin)

Lenin, V.I., *Materialism and Empirio-Criticism* (1909)

<https://www.marxists.org/archive/lenin/works/1908/mec/intro.htm>

<https://www.marxists.org/archive/lenin/works/1908/mec/one1.htm>

<https://www.marxists.org/archive/lenin/works/1908/mec/one3.htm>

*Collected Works, Volume 14*, p 90 in the text - on monism, mind and body

Lenin - disagreement with Nikolai Bukharin over what a (drinking) glass is

<https://www.marxists.org/archive/lenin/works/1921/jan/25.htm>

Levins, Richard

[https://en.wikipedia.org/wiki/Richard\\_Levins](https://en.wikipedia.org/wiki/Richard_Levins)

<https://ebin.pub/the-dialectical-biologist-0674202813-9780674202818.html>

Levins, Richard, *The Dialectical Biologist, Conclusion: Dialectics* (1985)

<https://www.amazon.com/Dialectical-Biologist-Richard-Levins/dp/067420283X>

Lewontin, Richard Charles

[https://en.wikipedia.org/wiki/Richard\\_Lewontin](https://en.wikipedia.org/wiki/Richard_Lewontin)

Lewontin, Richard, *The Dialectical Biologist, Conclusion: Dialectics* (1985)

<https://www.amazon.com/Dialectical-Biologist-Richard-Levins/dp/067420283X>

<https://ebin.pub/the-dialectical-biologist-0674202813-9780674202818.html>

Lichtenstein, Rosa

Background <https://symptomaticcommentary.wordpress.com/2014/05/11/interview-with-rosa-lichtenstein-archive/>

Web site <http://anti-dialectics.co.uk/page%2001.htm#Background>

Discussion [https://en.wikipedia.org/wiki/Talk%3ADialectical\\_materialism](https://en.wikipedia.org/wiki/Talk%3ADialectical_materialism)

Interview <https://libcom.org/library/anti-dialectics>

Line of March - debate about ultraleftism and party building (1989)

<https://www.marxists.org/history/erol/ncm-7/lom-ultra-left.pdf>

Logic, Encyclopedia Britannica

<https://www.britannica.com/topic/dialectic-logic>

Machel, Samora, *The People's Democratic Revolutionary Process in Mozambique - The Question of Ideology in a Broad Front* (c. 1985)

[https://archive.org/stream/samoramachelspeechesandwritings/samoramachelspeechesandwritings\\_djvu.txt](https://archive.org/stream/samoramachelspeechesandwritings/samoramachelspeechesandwritings_djvu.txt)

Magdo, Zsuzsanna, *The Socialist Sacred: Atheism, Religion and Culture in Communist Romania, 1948-1989* (Ph.D. Dissertation, University of Illinois at Urban-Champaign) (2016)

<https://www.ideals.illinois.edu/items/95364>

Magubane, Bernard, *Amilcar Cabral: Evolution of Revolutionary Thought* (1971)

[https://escholarship.org/content/qt8p65m9zc/qt8p65m9zc\\_noSplash\\_84eb3f43f70fe01191573f5d4efa9cd1.pdf](https://escholarship.org/content/qt8p65m9zc/qt8p65m9zc_noSplash_84eb3f43f70fe01191573f5d4efa9cd1.pdf)

Maher, George, *On Dialectics: Decolonizing Dialectics* (Radical Americas) (2017)

[https://www.dukeupress.edu/Assets/PubMaterials/978-0-8223-6243-2\\_601.pdf](https://www.dukeupress.edu/Assets/PubMaterials/978-0-8223-6243-2_601.pdf)

Mao, Zedong, *Selected Works, Volume 1*

<https://www.marxists.org/reference/archive/mao/selected-works/volume-1/index.htm>

*On Correcting Mistaken Ideas In The Party* (December 1929)

*On Tactics Against Japanese Imperialism* (December 27, 1935)

*Problems of Strategy in China's Revolutionary War* (December 1936)

Mao Zedong, *On Practice* (1937)

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_16.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_16.htm)

Mao, Zedong, *On Contradiction* (1937)

[https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1\\_17.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-1/mswv1_17.htm)

Mao, Zedong, Talks at Chengtu, March 10, 1958

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_06.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_06.htm)

Mao, Zedong, *Speeches at the Second Session of the Eighth Party Congress May 8-23, 1958*

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_10.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_10.htm)

Mao, Zedong, *Examples of Dialectics (Abstracted Compilation)* (1959)

[https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8\\_48.htm#:~:text=Dialectics%20is%20to%20Present%20Two,of%20opposites%2C%20which%20is%20dialectics](https://www.marxists.org/reference/archive/mao/selected-works/volume-8/mswv8_48.htm#:~:text=Dialectics%20is%20to%20Present%20Two,of%20opposites%2C%20which%20is%20dialectics)

Mao, Zedong, Talks With Mao Yüan-hsin (2) (1966)

[https://www.marxists.org/reference/archive/mao/selected-works/volume-9/mswv9\\_51.htm](https://www.marxists.org/reference/archive/mao/selected-works/volume-9/mswv9_51.htm)

Marxism for Newbies: *Dialectical Materialism*, by Dash the Internet Marxist

<https://dashthered.medium.com/marxism-for-normal-people-dialectical-materialism-deb5034685a4>

Marxism - collections of documents

[https://www.marxists.org/reference/subject/philosophy/front\\_pg.htm#physics](https://www.marxists.org/reference/subject/philosophy/front_pg.htm#physics)

Vast collection of documents. Has links to articles on epistemology and modern physics, Marxist orthodoxy, Western Marxism, Recent Marxism

<https://www.marxists.org/subject/science/index.htm>

Marxism and natural science, Marxism and Soviet Science

Marxist-Leninist Education Project Theory of Knowledge Group, *Dialectical or mechanical materialism (A Response)* (1980)

<https://www.marxists.org/history/erol/ncm-6/lom-reply-newlin.htm>

Marx & Engels three laws of dialectics, with examples

<https://socialismtoday.org/introducing-marxism-dialectical-materialism>

Marx, Karl, *A Contribution to the Critique of Political Economy* (1859)

<https://www.marxists.org/archive/marx/works/1859/critique-pol-economy/preface.htm>

Marx, Karl, *The German Ideology* (1846)

<https://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm>

Marx, Karl, *Theses on Feuerbach* (1845)

<https://www.marxists.org/archive/marx/works/1845/theses/theses.htm>

Mattick, Paul, *Marxism and the New Physics* (1960)

<https://www.marxists.org/archive/mattick-paul/1960/new-physics.htm>

May, Edwin C., *The American Institutes for Research Review of the Department of Defense's STAR GATE Program: A Commentary* (1996)

[https://www.scientificexploration.org/docs/10/jse\\_10\\_1\\_may.pdf](https://www.scientificexploration.org/docs/10/jse_10_1_may.pdf)

May, Edwin, Rubel, Victor, McMoneagle, Joseph, and Auerbach, Loyd, *ESP Wars East and West: An Account of the Military Use of Psychic Espionage as Narrated by the Key Russian and American Players* (2015)

<https://www.monroeinstitute.org/products/esp-wars-east-west>

May, Edwin C. and Marwaha, Sonali, *The Multiphasic Model of Precognition: The Rationale* (2015)

<https://www.proquest.com/openview/0a53364973770acb4cd0ffe4064559e2/1?pq-origsite=gscholar&cbl=42308>

<https://carloossalvarado.wordpress.com/tag/precognition-sonali-marwaha-edward-may/>

May, Edwin C. and Marwaha, Sonali Bhatt, *The Star Gate Archives, Reports of the United States Government Sponsored Psi Program, 1972–1995. Volume 1: Remote Viewing, 1972–1984* (2018)

<https://mcfarlandbooks.com/product/the-star-gate-archives/>

<https://www.amazon.com/Star-Gate-Archives-Government-Sponsored/dp/1476667527>

Mayr, Walter Ernst

[https://en.wikipedia.org/wiki/Ernst\\_Mayr](https://en.wikipedia.org/wiki/Ernst_Mayr)

Mayr, Ernst, *Roots of Dialectical Materialism* (2005)

<http://ihst.ru/projects/sohist/books/naperelome/1/12-18.pdf>

McKinney, Ronald H., *The Origins of Modern Dialectics, Journal of the History of Ideas* Vol. 44, No. 2 (Apr. - Jun., 1983), pp. 179-190

Menger, Karl, *Morality, Decision and Social Organization: Toward a Logic of Ethics* (1974)

<https://www.amazon.com/Morality-Decision-Social-Organization-Collection/dp/9027703183>

Motor City Labor League, *The Dialectics of the Ravitz Campaign* (1974)

<https://marxists.architexturez.net/history/erol/ncm-1a/ravitz-campaign.pdf>

Motor City Labor League, *The Political Line of the Motor City Labor League (ML)* (1974)

<https://www.marxists.org/history/erol/ncm-2/mcll-1/intro.htm>



Mutze, Ulrich, *Is computation a reasonable metaphor for what Nature is doing?* (2011)  
[https://www.researchgate.net/post/Is\\_computation\\_a\\_reasonable\\_metaphor\\_for\\_what\\_Nature\\_is\\_doing](https://www.researchgate.net/post/Is_computation_a_reasonable_metaphor_for_what_Nature_is_doing)

National Joint Study - nationwide party-building study in USA (1980)  
<https://www.marxists.org/history/erol/ncm-5/green-mao.pdf>

Newlin, Clay, *PWOC'S Leftism-a self-criticism* (Philadelphia Workers Organizing Committee) (1979)

<https://www.marxists.org/history/erol/ncm-6/pwoc-self-crit.htm>

<https://www.marxists.org/history/erol/ncm-6/pwoc-pul-4.htm>

Nie Chongrung, *I Resolutely Support Scientific Research in ESP*, Chinese Journal of Somatic Science, Vol 1., No. 4, 4<sup>th</sup> issue, August 1991

CIA Document: Approved For Release 2000/08/10 : CIA-RDP96-00792R000300020002-1

Nie Chongrung - cited in Ebon, *Psychic Warfare: Threat or Illusion?*

<https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=9cc65605ff582af76bebad3d0534315af45bb8fa>

Nielsen, Harry, *Against the Copenhagen Interpretation of QM – in Defence of Marxism* (2005)

<https://www.marxist.com/quantum-mechanics-copenhagen130705.htm>

Pacific Collective, *Characteristics of Left and Right Opportunism* (c. 1980)

<https://www.marxists.org/history/erol/ncm-1a/pc-errors.pdf>

## **Parapsychology around the World (Appendix 8)**

Australia and Asia

<https://psi-encyclopedia.spr.ac.uk/articles/experimental-psi-research-asia-and-australia>

Bulgaria

<https://gdil.org/the-vanga-files/>

Czechoslovakia - Milan Ryzl

[https://www.academia.edu/33307887/In\\_Memoriám\\_Milan\\_Ryzl\\_1928-2011](https://www.academia.edu/33307887/In_Memoriám_Milan_Ryzl_1928-2011)

<https://www.encyclopedia.com/people/medicine/psychology-and-psychiatry-biographies/milan-ryzl>

German Democratic Republic

<https://balticworlds.com/occultism-in-the-gdr/>

Europe

<https://psi-encyclopedia.spr.ac.uk/articles/experimental-parapsychology-europe>

Ibero-America

<https://documents2.theblackvault.com/documents/cia/stargate/STARGATE%20%232%20174/Part0001/CIA-RDP96-00792R000400100006-7.pdf>

India

<https://www.encyclopedia.com/science/encyclopedias-almanacs-transcripts-and-maps/parapsychology-indian-journal-parapsychological-research>

Israel

<https://psycnet.apa.org/record/1983-20009-001>

Latvia

<https://journals.sagepub.com/doi/10.2466/08.17.PR0.116k14w9>

Lithuania

[https://www.cesnur.org/2004/waco\\_alisauskiene.htm](https://www.cesnur.org/2004/waco_alisauskiene.htm)

Russia

<https://psi-encyclopedia.spr.ac.uk/articles/psi-research-russia>

<https://psi-encyclopedia.spr.ac.uk/articles/psi-research-russia>

<https://www.vox.com/2014/11/13/7210517/russian-psychics-everywhere>

Spain

<https://www.proquest.com/openview/43a0eae1e9e2431f83c795549cfc48f5/1?pq-origsite=gscholar&cbl=1818062> (downloads a file)

Ukraine

[https://www.researchgate.net/publication/339166445\\_The\\_current\\_state\\_of\\_Psi-studies\\_and\\_the\\_public\\_concept\\_of\\_parapsychology\\_in\\_Ukraine](https://www.researchgate.net/publication/339166445_The_current_state_of_Psi-studies_and_the_public_concept_of_parapsychology_in_Ukraine)

Vietnam

[https://www.igpp.de/eks/pdf/BW\\_2021\\_4.pdf](https://www.igpp.de/eks/pdf/BW_2021_4.pdf)

<https://sites.google.com/a/uw.edu/vietnamstudiesgroup/discussion-networking/vsg-discussion-list-archives/vsg-discussion-2010/research-into-the-paranormal>

<https://ruickbie.com/2020/12/15/parapsychological-adventures-in-vietnam/>

Yugoslavia

<https://balticworlds.com/i-was-fascinated-by-the-extent-of-occulture-in-a-communist-country-like-yugoslavia-of-the-1970s/>

[https://hellboy.fandom.com/wiki/Bureau\\_for\\_Paranormal\\_Research\\_and\\_Defense](https://hellboy.fandom.com/wiki/Bureau_for_Paranormal_Research_and_Defense)

Petersen, Eric, *The Poverty of Dialectical Materialism* (1994)

[https://www.google.com/books/edition/The\\_Poverty\\_of\\_Dialectical\\_Materialism/yZt8PQAACA-AJ?hl=en](https://www.google.com/books/edition/The_Poverty_of_Dialectical_Materialism/yZt8PQAACA-AJ?hl=en)

Physica Scripta, *The sounds of science—a symphony for many instruments and voices: part II*  
Phys. Scr. 99 (2024) 052501

<https://doi.org/10.1088/1402-4896/ad2abe>

Abstract: Despite its amazing quantitative successes and contributions to revolutionary technologies, physics currently faces many unsolved mysteries ranging from the meaning of quantum mechanics to the nature of the dark energy that will determine the future of the Universe. It is clearly prohibitive for the general reader, and even the best informed physicists, to follow the vast number of technical papers published in the thousands of specialized journals. For this reason, we have asked the leading experts across many of the most important areas of physics to summarise their global assessment of some of the most important issues. In lieu of an extremely long abstract summarising the contents, we invite the reader to look at the section headings and their authors, and then to indulge in a feast of stimulating topics spanning the current frontiers of fundamental physics from ‘The Future of Physics’ by William D Phillips and ‘What characterises topological effects in physics?’ by Gerard ’t Hooft through the contributions of the widest imaginable range of world leaders in their respective areas. This paper is presented as a preface to exciting developments by senior and young scientists in the years that lie ahead, and a complement to the less authoritative popular accounts by journalists.

Plekhanov, Georgi Valentinovich, *Essays on the History of Materialism* (1893)

<https://www.marxists.org/archive/plekhanov/1893/essays/3-marx.htm>

Plekhanov, Georgi, *In Defence of Materialism: The Development of the Monist View of History* (1895)

<https://www.marxists.org/archive/plekhanov/1895/monist/ch01.htm>

Plekhanov, Georgi, *Fundamental Problems of Marxism* (1907)

<https://www.marxists.org/archive/plekhanov/1907/fundamental-problems.htm>

<https://www.marxist.com/book-the-revolutionary-philosophy-of-marxism/fundamental-problems-of-marxism-excerpts.htm>

Popper, Karl Raimund

[https://en.wikipedia.org/wiki/Karl\\_Popper](https://en.wikipedia.org/wiki/Karl_Popper)

Pratt, Joseph and Zhao, Yingnan, *Daoist Critique of Dialectics* (2018)

[https://forum.dialecticinstitute.org/Pratt\\_Yingnan-Daoist-Critique-of-Dialectics.pdf](https://forum.dialecticinstitute.org/Pratt_Yingnan-Daoist-Critique-of-Dialectics.pdf)

Puthoff, Harold E., *Psychoenergetics Research in the People’s Republic of China* (1982)

<https://www.cia.gov/readingroom/docs/CIA-RDP96-00792R000400320001-8.pdf>

Radin, Dean, *The Conscious Universe, The Scientific Truth of Psychic Phenomena* (2009)

[https://www.researchgate.net/publication/243772480\\_The\\_conscious\\_universe\\_The\\_scientific\\_truth\\_of\\_psychic\\_phenomena](https://www.researchgate.net/publication/243772480_The_conscious_universe_The_scientific_truth_of_psychic_phenomena)

Rauscher, Elisabeth and Targ, Russell, *Investigation of a Complex Space-Time Metric to Describe Precognition of the Future* (2001)

<https://pubs.aip.org/aip/acp/article-abstract/863/1/121/753852/Investigation-of-a-Complex-Space-Time-Metric-to?redirectedFrom=fulltext>

Red Banner, *The Dialectics of the Communist League: Double-Dealing, Intrigue and Conspiracy – An Attempt to Liquidate the American Communist Movement. On the “Dialectics” of the “Theoreticians” of the Communist League* (1974)

<https://www.marxists.org/history/erol/ncm-2/red-banner/part1.htm>

Remoteviewing.link - curated links to the field of remote viewing (web site)

<https://remoteviewing.link/>

Rosenblatt, Marty - interpretations of Quantum Mechanics

[http://p-i-a.com/Magazine/Issue24/Connections\\_24.html](http://p-i-a.com/Magazine/Issue24/Connections_24.html)

[http://p-i-a.com/Magazine/Issue14/Intuition\\_14.htm](http://p-i-a.com/Magazine/Issue14/Intuition_14.htm)

Rosenfeld, Léon

[https://en.wikipedia.org/wiki/L%C3%A9on\\_Rosenfeld](https://en.wikipedia.org/wiki/L%C3%A9on_Rosenfeld)

Rosenthal, Bernice Glatzer, *The Occult in Soviet and Russian Culture*, Cornell (1997)

<https://www.ucis.pitt.edu/nceer/1993-806-03-Rosenthal.pdf>

Russell, Bertrand, *An Outline of Philosophy, Ch. I: Philosophical Doubts* (1927)

[https://api.pageplace.de/preview/DT0400.9781134027484\\_A24933295/preview-9781134027484\\_A24933295.pdf](https://api.pageplace.de/preview/DT0400.9781134027484_A24933295/preview-9781134027484_A24933295.pdf)

Sanmugathasan, Nagalingam (Encyclopedia of Anti-Revisionism On-Line)

<https://www.marxists.org/history/erol/sri-lanka/index.htm>

Sartre, Jean-Paul Charles Aymard

[https://en.wikipedia.org/wiki/Jean-Paul\\_Sartre](https://en.wikipedia.org/wiki/Jean-Paul_Sartre)

Sartre, Jean-Paul, *Critique of Dialectical Reason, Volume 1, Theory of Practical Ensembles* (1960)

<https://www.marxists.org/reference/archive/sartre/works/critic/sartre2.htm>

Schaefer, Georg, *In Defiance of the Ideologists: Parapsychology in the Soviet Union. Journal of Parapsychology*, Durham, N.C. Vol. 30, Issue 1, (Mar 1, 1966): 48

Schroer, Bert, *Pascual Jordan, his contributions to quantum mechanics and his legacy in contemporary local quantum physics* (2003)

<https://arxiv.org/abs/hep-th/0303241>

Seager, William, *The Philosophical and Scientific Metaphysics of David Bohm* (2018)

<https://pubmed.ncbi.nlm.nih.gov/33265583/>

Searle, John

[https://en.wikipedia.org/wiki/John\\_Searle](https://en.wikipedia.org/wiki/John_Searle)

Searle, John, *The Rediscovery of the Mind* (1992; 1994 MIT edition)  
<https://mitpress.mit.edu/9780262691543/the-rediscovery-of-the-mind/>

Seize the Time - on the principal contradiction (1977)  
<https://www.marxists.org/history/erol/ncm-1a/seize.htm>

*Serving the People with Dialectics: Essays on the Study of Philosophy by Workers and Peasants.*  
Foreign Languages Press (1972)  
<https://www.marxists.org/history/erol/china/dialectics.pdf>

Shao Tieh-Chen, *Revolutionary Dialectics, How to appraise Imperialism*, Foreign Languages Press (1963)  
<https://www.marxists.org/history/erol/china/dialectics-2.pdf>

Sheehan, Helena, *Marxism and the Philosophy of Science: A Critical History* (1985, 1993, 2017)  
<https://teoriaevolutiva.files.wordpress.com/2013/06/e-sheehan-marxism-and-the-philosophy-of-science.pdf>  
<https://z-lib.io/author/Helena%20Sheehan>

Sheehan, *Marxism and Science Studies: A Sweep Through the Decades* (2007)  
<https://z-lib.io/author/Helena%20Sheehan>  
<https://philpapers.org/rec/SHEMAS>

Sheldrake, Rupert, *The Credit Crunch for Materialism* (2009)  
<https://www.sheldrake.org/research/the-credit-crunch-for-materialism>

Silber, Irwin, *Grasping Revolutionary Theory: A Guide for Marxist-Leninist Study Groups - A Guardian pamphlet* (1977)  
<https://www.marxists.org/history/erol/ncm-4/silber-study-groups.pdf>

Sison, Jose Maria, *On the Philosophy of Marxism-Leninism-Maoism* (2021)  
<https://foreignlanguages.press/colorful-classics/basic-principles-of-marxism-leninism-a-primer-jose-maria-sison/>

Smith, Daz

Web site: <https://www.remoteviewed.com/about-daz-smith/#>

Books: <https://www.remoteviewed.com/daz-smith-remote-viewing-books/>

Eight Martinis magazine: <http://www.eightmartinis.com/>

Podcast: <https://www.remoteviewed.com/remote-viewing-podcast/>

YouTube videos (575 of them): <https://www.youtube.com/hashtag/dazsmith>

YouTube channel: <https://www.youtube.com/@ParanormalViewing>

Future Forecasting Group: <https://www.futureforecasters.com/>

Photography: <http://www.dazsmithphotography.com/>

Smith, Daz, *Surfing the Psychic Internet* (2006)

<https://www.amazon.com/Surfing-psychic-internet-Daz-Smith/dp/1430309407>

Smith, Paul H., *A Review of the CIA/AIR Report, An Evaluation of Remote Viewing: Research and Applications* by "Mr. X" (Paul Smith), *Bologna On Wry*.

[https://www.reddit.com/r/a:t5\\_k7e7q/rising/](https://www.reddit.com/r/a:t5_k7e7q/rising/)

<https://www.anomalist.com/commentaries/ciarv1.html>

Sommer, Andreas, *Psychical Research in the History and Philosophy of Science* (2014)

<https://philpapers.org/rec/SOMPRI>

<https://www.newdualism.org/papers/A.Sommer/Sommer-SHPSC2014.pdf>

Spirkin, Alexander, *Dialectical Materialism, Chapter 3. Consciousness of the World and the World of Consciousness. The Material and the Spiritual* (1983)

<https://www.marxists.org/reference/archive/spirkin/works/dialectical-materialism/ch03-s02.html>

Stanford Encyclopedia of Philosophy, *Contradiction*

<https://plato.stanford.edu/entries>

Stanford University, *An Introduction to Philosophy*

<https://web.stanford.edu/~bobonich/glances%20ahead/IV.excluded.middle.html>

Stites, Richard, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989) p. 42.

[http://chinhnghia.com/Stites\\_Richard\\_Revolutionary\\_Dreams\\_Utopian\\_Vision\\_and\\_Experimental\\_Life\\_in\\_the\\_Russian\\_Revolution.pdf](http://chinhnghia.com/Stites_Richard_Revolutionary_Dreams_Utopian_Vision_and_Experimental_Life_in_the_Russian_Revolution.pdf)

Swann, Ingo - Estate (web site)

<https://ingoswann.com/>

Swann, Ingo, *What Will Happen to You When the Soviets Take Over* (1980)

<https://www.amazon.com/What-will-happen-when-Soviets/dp/0960494669>

Swann, Ingo, *Natural ESP - A Layman's Guide to Unlocking the Extra Sensory Power of Your Mind* (1987)

Swann, Ingo, *New Scientific Discoveries Regarding the Existence of Certain Psi Faculties*. Synopsis of a paper presented on 21 March 1994 at the United Nations to members of the Society for Enlightenment and Transformation

<https://www.meditation24-7.com/senses/page25/page25.html>

Swann, Ingo, *Superpowers of the Human Biomind* (2004)

[https://www.academia.edu/31098436/Superpowers\\_of\\_the\\_Human\\_Biomind\\_New\\_Content\\_in\\_Section\\_6\\_Ingo\\_Swann\\_Honor\\_Roll\\_for\\_Remote\\_Viewing](https://www.academia.edu/31098436/Superpowers_of_the_Human_Biomind_New_Content_in_Section_6_Ingo_Swann_Honor_Roll_for_Remote_Viewing)

<https://www.scribd.com/doc/122210985/Ingo-Swann-Superpowers-of-the-Human-Biomind>

Taketani, Mitsuo

[https://en.wikipedia.org/wiki/Taketani\\_Mitsuo](https://en.wikipedia.org/wiki/Taketani_Mitsuo)

Tafarella, Santi, *Promissory Materialism and Second Coming Messianism?* (2009)  
<http://santitafarella.wordpress.com/2009/10/01/promissory-materialism-and-second-coming-messianism/>

The New Voice, *What do left and right mean?* (1977)  
<https://www.marxists.org/history/erol/ncm-3/nv-left-right.htm>

Trotsky, Leon, *Dialectical Materialism and Science* (1927)  
<https://www.marxists.org/archive/trotsky/1925/09/science.htm>

Trotsky, Leon, *A Petty Bourgeois Opposition in the Socialist Workers Party* (1939)  
<https://www.marxists.org/archive/trotsky/edom/dm/09-pbopp.htm>

UFO - large Swedish UFO collection  
<https://www.afu.se/collections/report-files/>

Vallée, Jacques, *Forbidden Science 4, Chapter 13, p 389* (Kindle)(2019)  
<https://www.amazon.com/Forbidden-Science-Four-Jacques-Vallée/dp/035927496X>

Wallis, Victor, *Richard Levins and Dialectical Thinking* (2015-2017)  
[https://scholar.google.com/scholar?q=Wallis,+Victor,+Richard+Levins+and+Dialectical+PDF&hl=en&as\\_sdt=0&as\\_vis=1&oi=scholart](https://scholar.google.com/scholar?q=Wallis,+Victor,+Richard+Levins+and+Dialectical+PDF&hl=en&as_sdt=0&as_vis=1&oi=scholart)  
<https://ices.library.ubc.ca/index.php/workplace/article/view/186403>

Watts, Fraser, *Morphic Fields and Extended Mind*, *Journal of Consciousness Studies*, 18, No. 11–12, 2011, pp. 203–24  
<https://www.sheldrake.org/research/morphic-resonance/scientific-papers-on-morphic-resonance>

Wilde, Lawrence, *Logic: Dialectic and contradiction* (1991)  
<https://www.marxists.org/reference/subject/philosophy/works/en/wilde1.htm>  
<https://www.marxists.org/reference/subject/philosophy/works/en/wilde.htm>

Woods, Alan and Grant, Ted, *Reason in Revolt, Dialectical Philosophy and Modern Science* (1995)  
<https://dokumen.pub/reason-in-revolt-marxist-philosophy-and-modern-science-v-4424612.html>

Yao Wen-Yuan, *On Mr. Chou Ku-Ch'eng's View on Contradiction*. May 10, 1964  
<https://www.marxists.org/history/erol/china/yao5.pdf>

Zhivkova, Lyudmila, *Occult Communism in Theory: Weltanschauung from Private Creed to State Policy* (2017)  
<https://core.ac.uk/download/pdf/158321769.pdf>

Znamenski, Andrei, *Red Shambhala, Magic, Prophecy and Geopolitics in the Heart of Asia*  
Theosophical Publishing House (2011)

<https://dokumen.pub/red-shambhala-magic-prophecy-and-geopolitics-in-the-heart-of-asia-paperbacknbsped-0835608913-9780835608916.html>

[https://www.academia.edu/19861533/Red\\_Shambhala\\_Magic\\_Prophecy\\_and\\_Geopolitics\\_in\\_the\\_Heart\\_of\\_Asia\\_Quest\\_Books\\_2011\\_American\\_Edition\\_296\\_pp\\_PDF](https://www.academia.edu/19861533/Red_Shambhala_Magic_Prophecy_and_Geopolitics_in_the_Heart_of_Asia_Quest_Books_2011_American_Edition_296_pp_PDF)



## SUBJECT INDEX

### A

- AATIP (Advanced Aerospace Threat Identification Program), 304
- Absolute Equalitarianism, 42
- Absolute Spirit, 127
- abstractions, 69–70, 120, 122–24, 163, 259, 278, 314
- accuracy, 3, 50, 170, 181, 201, 213, 278, 295, 323, 325
- AC/PRC (Amilcar Cabral-Paul Robeson Collective), 290, 332
- active information (Bohm), 158, 160, 249
- acupuncture, traditional, 51
- Advanced Aerospace Threat Identification Program (AATIP), 304
- advanced materials science, 254
- Adventures in Remote Viewing (John Adams), 310, 332
- aesthetics, 220, 326, 339
- African Liberation Support Committee (ALSC), 283
- AGI (Artificial General Intelligence), 185, 255
- agnostics, 92, 128, 243–44
- AiResearch Manufacturing Company, 210
- AIR report, 203
- Albania, 264, 266, 290
- alien abduction, 304, 311
- alien bases on earth, 253, 311
- aliens, 92, 224, 232, 234–35, 255–56, 303–4, 310, 312
- All-Russian Congress (1992), 218
- alphanumerics, 208
- ALSC (African Liberation Support Committee), 283
- aluminum tube, moved (PK), 212
- American Exceptionalism, 268
- American Philosophical Society, 180
- American Society for Psychical Research (ASPR), 196
- American Workers Communist Party, 268
- Amilcar Cabral/Paul Robeson Collective, 290, 332
- amplituhedron, 25, 177
- analysis, concrete of concrete conditions, 45, 282–84
- anarchists, 73–74, 270, 283
- Andromeda Galaxy, 137
- animals, 31, 102, 112, 115, 126, 129–30, 134, 217, 232, 235
- animal vision, 250
- anthropocentrism, 302
- anti-communism, 171, 265
- anti-communist, 116, 218
- anti-dialectics, 83
- Anti-Dühring (Engels), 74, 78, 88–89, 128, 151, 301, 334, 336
- anti-revisionism, 119, 266
- Anti-Revisionism On-Line (Encyclopedia), 30, 348
- anti-revisionist communist movement, 278, 282
- antithesis, 46, 60, 93, 121–22, 150, 259, 267–68, 270
- appearance, 49, 70, 83, 101, 107, 109, 124, 130–31, 234–35, 246, 280
- appearance and essence, 280
- applications, practical, 22, 170, 206
- Applied Precognition Project (APP), 205, 222
- Applying Philosophy in Transport (China), 49
- approximations, 76, 161, 242, 245, 321–22
  - gradual, 173
  - local, 186
  - valid, 160
- archives (Star Gate), 200, 253, 344
- Aristotle's logic, 15, 19
- armies, 42, 46, 53, 134, 241, 330
- Art and Science of Predicting Outcomes for Sports, 230, 331, 340–41
- artificial intelligence, 97, 238, 254, 256
  - strong, 180
- ARV (Associative Remote Viewing), 11, 201, 230, 331, 340–41
- ARV, successful systems, 14
- Asia, 221, 316, 345, 352
- ASPR (American Society for Psychical Research), 196

Associative Remote Viewing. *See* ARV  
astronomers, 96, 144, 151, 199, 325  
    Sir James Jeans, 222  
atheism, 81, 220, 342  
atomic philosophy, 140–41  
atomic physics, 141, 146, 333  
atoms, 140–45, 153–54, 168–69, 187, 191,  
    245, 247, 250, 256–57, 321, 324–27,  
    339, 341  
    and organisms, 144, 339  
    and quanta, 144  
    radium, 145  
    stable, 154  
August Twenty-ninth Movement (ATM),  
    278, 283–85  
Austrian Society for Psychical Research,  
    192  
authoritarianism, 66, 238, 242, 256

## **B**

BACU (Bay Area Communist Union), 283  
Bananaslam training group (TDS), 194  
Bard on Chalmer's types A-F, 174  
base and superstructure, 83  
Bay Area Communist Union (BACU), 283  
behaviorism, 174  
Beijing hospital of traditional medicine  
    paraplegic group, 51  
being  
    human, 98, 120, 135, 166, 173, 211, 227,  
    231, 285, 299, 308  
    non-material, 228, 234  
beliefs, 56, 90, 98–99, 112, 162, 188, 220,  
    236, 240, 306, 330  
    folk, 213  
Bell's criterion, 159  
Bell's theorem, 159  
Berkeley's principle, 147  
Better dead than red (slogan), 265  
Big Bang (cosmology), 189, 232  
billionaires, 8, 28, 241  
    number of in China, 28  
bio-communication, 207, 215  
Bio-Communication Laboratory, 214  
bioenergy, 214

Biological and Radio Communication  
    (Vasiliev), 219  
biology, 56, 62, 91, 97, 101–3, 109, 113–14,  
    146, 151, 168, 171, 187–89, 250  
    evolutionary, 56, 97  
    molecular, 93, 103, 202  
biomind, 181, 249, 303, 350  
bio-physical basis for psi faculties, 223  
Black Americans, 33, 334  
Black national question, 282, 284  
Black Workers Congress, 284  
body  
    in cognitive science research, 249  
    image, 181  
    and mind, 166, 222  
Bohr's principle of complementarity, 148,  
    170  
Bolshevik Party, 21, 268  
Bolshevik secret police (Gleb Boky), 207  
Bolshevization of Chinese Communist  
    Party, 48  
books on remote viewing, 9, 225  
Borg mind, 303  
bourgeoisie, 24, 28, 30, 40, 66, 125, 133,  
    135, 276, 286, 289  
brain, 96–98, 101, 127, 130–31, 156, 158,  
    164–65, 180–85, 188–91, 201–3, 244,  
    246, 248–49, 314–15  
    activity, 188, 248  
    to brain (telepathy), 314–15  
    human, 118, 123, 128, 188, 190, 248  
    and mind, 98, 244  
    science of, 188, 248, 256  
    states of, 190  
branching space-time theories, 318  
Brazil, 211, 241, 251  
Brecht's Epic Theater, 65  
Broad Front (Mozambique), 35, 342  
Broglie-Schrödinger wave fields, 170  
Browderism, 267  
Brownian motion, 141  
Bulgaria, 251, 316, 345  
business, 94–95, 105, 150, 198, 204–6, 252,  
    306  
    personal RV, 225  
    remote viewing, 198

successful remote viewing, 252

## C

cabbage (dialectics), 51

cadres, 36, 43, 46–47, 50, 271–72

California, 54, 156, 179, 194, 210, 268

California Communist League, 268

campaigns, 25, 45–46, 271–72, 290

capabilities

energetic (Psychotronics), 211

psychic, 8

unknown perceptual, 222

capitalism, 38, 65–67, 107, 110, 115,

240–41, 251, 259, 262, 284, 287

capitalist, 25, 31, 241

business cycle, 110

exploitation, 133

capitalist-roaders, 242

capitalist societies, advanced, 237

Cargo Cult Science, 327, 337

Carter, Jimmy, psychics found plane in  
Africa, 197

Cartesianism, 58

mode, 104

reductionism, 104–5

Cash-Landrum sighting, 311

categories, 18, 41, 93–94, 148, 175, 183,

190, 243, 245, 262–63, 269

fundamental in physics, 177

remote viewing session, 14

cattle mutilations, 310–11

causality, 143–44, 238, 247

classical, 154

neglected mechanism, 113, 334

causation, intentional, 185

cells, 62, 97, 109, 176, 219

Central America, 8, 197, 282

Central Intelligence Agency, 210, 215

Central Organization of US

Marxist-Leninists, 265, 270, 334

Ceylon Trade Union Federation (CTUF), 30

chair, 174, 233, 245, 321–22

Ch'ang-ch'un Motor Vehicle Plant, 27

change

bourgeois thought, 107

idealist dialectics, 109

internal, 57, 134

of positions, 82

in scientific theories, 157

structural, 34, 113

terminology, 323

channeling spirits, 235

charge, 177, 197, 208, 212, 284, 291, 293,  
322

charlatans, 297, 316

Chechnya campaign, and remote viewing,  
209

chemistry, 20–21, 62, 78, 89–93, 114,  
140–42, 168, 180, 188, 200

Chicano movement, 278

childhood, 18, 294, 328

children, 83, 130, 307, 313, 328

China, 7–8, 23, 25–26, 28–30, 33–34,  
39–43, 47–48, 54–55, 133–35, 239–42,  
250–51, 266, 313, 315, 335–36

Labor Laws, 55, 339

Second Revolutionary Civil War, 42–43  
society of, 30, 55

China Daily, 5, 54, 334

China's Revolutionary War, 43–45, 48, 343

Chinese cabbage (dialectics), 51

Chinese Communist Party, 22, 27, 40–41,  
43–44, 48, 135, 285, 313

Chinese medicine, 107

Chinese revolution, 42, 45, 47–48, 72, 135,  
237, 239–40

Chinese room argument, 180

Christ, Jesus, 298, 300

Christianity, 99, 121

CIA, 196–99, 203, 215, 241, 315, 334

CIA/AIR Report, 203, 350

CIA's activities, criticism, 215

circumstances, 29, 44, 70, 73–76, 94–95,  
110, 121, 123–24, 130, 293, 297

concrete, 39, 276

historical, 35

personal, 125

civil war, 41, 44–45, 75

clairvoyance, 187, 207, 211, 213, 218, 230,  
248, 314

class

stand, 78

struggle, 21, 28, 30, 35, 107, 133, 267, 278, 315  
 classes, 28, 34, 41, 52–53, 78, 83, 109, 112, 124–25, 128, 134, 262–63  
   analysis, 284, 286  
   capitalist, 251, 283  
   formation, 35  
   middle, 152  
   multiple, 263  
 Classical German Philosophy, 120, 337  
 class origin, 285–86  
 class structure, clearest (Army), 330  
 clients, 198, 205, 234, 252, 257  
   paying, 252  
 climate, 133–34, 209, 238  
   destruction, 256  
 closure, causal, 177  
 codes, genetic, 62, 188  
 cognition, 21, 92, 99, 101, 121, 132, 184–85, 202–3, 232  
   anomalous, 84–85  
 cognitive science, 177, 184  
 Collected Works (Lenin), 22, 74, 246, 341  
 collectives, communist, 282–83  
 colonialism, 45–46, 262, 264  
 combats, 21, 134, 209  
 Communism, 10, 24, 27, 39–40, 93, 220, 240, 242, 279, 329, 339–40  
 Communist China, 8, 216  
 Communist Federation, 276, 335  
 Communist International, 38  
 Communist Labor Party (CLP), 264, 266–67  
 Communist League (CL), 266–71, 282, 334–35, 348  
 Communist movements, 75, 264, 266, 268, 275, 284–85  
 Communist Party (CPUSA), 8, 29–30, 42–43, 207, 214, 239, 241, 264–67, 272, 282–83, 339  
 Communist Party of China, 28, 39, 42–43, 47–48, 279, 285, 335  
 Communist Party of Great Britain, 30  
 Communist Party of India, 30  
 Communist Party of the Philippines (CPP), 29, 289–90  
 Communist Political Association (Browder), 267  
 communists, 30, 155, 217, 241, 270, 280, 282–84, 286, 329–31, 338  
 Communist Workers Group (CWG), 119, 283  
 Communist Workers Party (CWP), 264, 280, 335  
 communities, 35, 94, 107  
 companies, 115, 198, 210, 252  
 complementarity, 139, 148, 151–55, 170, 339  
 complexity, 95, 102, 110, 187, 250, 281, 291, 319, 322  
 Complex Space-Time Metric (Rauscher & Targ), 201, 347  
 computation, 184–85, 201, 319, 345  
 computers, 160, 174, 185, 254–56  
 comrades, 23, 27, 42, 45–46, 48, 80, 136, 271, 275, 278–79, 287  
 conceptions, 21, 38, 95, 101, 123–24, 132–33, 144, 148, 167–68, 170, 181  
 concepts, 60–61, 76–77, 84, 86, 88, 121–22, 140–42, 144, 147–49, 152, 180–81, 190–92, 229–30, 280–81, 321–24  
   basic, 96, 148  
   mathematical, 153  
   theoretical, 273  
 concrete conditions, 45, 274, 282, 285  
 conditions, 31, 33–35, 41–42, 44, 49–50, 70, 74, 89, 106, 108–9, 124, 150, 159, 195, 283–86  
   given, 23, 53, 135–36, 157  
   historical, 135  
   objective, 268–69, 272  
   social, 35, 98, 114  
 conferences, 42, 194, 220, 253, 276, 292, 318, 339  
 conflicts, 18, 33, 58, 60, 64, 67, 70, 99, 103, 154, 223  
 Congress, US on UFOs, 252  
 connections, 74, 94–96, 112, 159–60, 166, 228, 231–32, 248, 252, 294, 302  
   establishing, 94  
   logical, 149, 181  
   organic, 94

consciousness, 6–7, 117–18, 120, 122–25, 128–29, 131, 148–49, 164–66, 173–77, 179–83, 188–91, 201, 222–23, 227–28, 232–33, 244–45, 247–49, 302–3, 314–15, 350  
 artificial, 185  
 class, 53  
 hard problem of, 173, 175  
 human, 183, 227–28, 233, 315  
 paranormal experiences, 223  
 political, 37, 44  
 and Remote Viewing, 193  
 social, 179, 269  
 stream of, 162, 183  
 Consciousness is the fundamental, 227, 232, 243  
 Consciousness Studies (journal), 187–88, 248, 351  
 conservation, 104, 320–21, 327  
 conspiracy, 195, 268, 348  
 constants, 24, 58, 107–8, 159, 189, 227, 251, 259  
 constructs, theoretical, 291, 295–96  
 context, 33, 36, 99, 108, 158, 160, 165, 220, 223, 249, 287  
 contradictions, 23, 25–26, 30, 34, 39–41, 49–55, 60–62, 66–67, 70–72, 74, 81–83, 109–11, 124, 126–27, 132–36, 259, 270–77, 287–88, 290, 350–51  
 of capitalism, 65–67  
 in China, 40, 241  
 fundamental, 241, 288  
 internal, 41, 80, 96, 133–34  
 logical, 61–62, 110  
 nonantagonistic, 275  
 non-antagonistic, 277  
 non-principal, 23, 40, 136  
 resolving, 51, 135  
 secondary, 275, 288  
 Controlled Remote Viewing (CRV), 11, 200, 210, 311  
 controversies, 43, 74, 118, 145, 180, 202, 244  
 major inner-Party (China), 43  
 conversations, 84, 102, 149, 185, 255, 305, 330  
 Copenhagen Interpretation of quantum mechanics, 139, 151, 154–55, 169, 318, 345  
 correctness, 21, 46, 100, 135, 279, 285  
 theoretical, 278  
 countries, capitalist, 40, 94, 216, 239, 241  
 COUSML (Central Organization of U.S. Marxist-Leninists), 265, 270, 334  
 COVID, 39  
 CPC (Communist Party of China), 54  
 CPC  
 Central Committee, 42–44, 46–48  
 Eighth Central Committee, 28  
 Eleventh Central Committee, 28, 335  
 Ninth Party Congress, 41  
 Seventh National Congress, 48  
 Sixth Central Committee, 47–48  
 Sixth National Congress, 47  
 Sixth Plenary Session, 28, 335  
 Tenth National Congress, 285  
 Tenth Plenary Session, 28  
 Third Plenary Session, 47–48  
 CP-ML (Communist Party - Marxist-Leninist), 264  
 CPP (Communist Party of the Philippines), 29, 289–90  
 creation, 99, 121–22, 152, 209, 233, 259, 300–301  
 creators, 140, 227, 233  
 creatures, 62, 307  
 10-foot tall, 307  
 ephemeral, 191  
 living, 25, 130  
 organized, 130–31  
 predatory, 226  
 credit, 61, 89, 188, 296  
 Credit Crunch for Materialism (Sheldrake), 188, 349  
 crimes, 209, 272, 292  
 crisis, 66, 216, 238, 266  
 criticisms, 23, 29, 31, 124, 129, 141, 145, 151, 155, 280–81, 288, 295  
 of dialectics, 23  
 critics, 61, 68, 88, 141  
 critique, 38, 64–65, 72–73, 77, 86, 88, 155, 180, 285

crop circles, 310, 338  
crust, 6, 10, 238, 298–300  
CRV (Controlled Remote Viewing),  
199–200, 205, 251, 311  
crystals, 95, 187, 250  
Cuba, 8, 33, 78, 264  
Cuban revolution, 37, 265  
Cultural Revolution (China), 241  
culture, 35, 116, 189, 220, 232, 235, 296,  
339, 342  
CWG (Communist Workers Group), 119,  
283  
CWP (Communist Workers Party), 264,  
280, 335  
Czechoslovakia, 196, 211, 215, 316, 345

**D**

danger, 38, 67, 112, 156, 160, 242, 256  
Daoist Critique of Dialectics, 86, 347  
DARPA, 199  
Dead Letters (dialectics), 52  
death, 24–25, 37, 90, 92, 102–3, 117, 120,  
191, 209, 215, 230  
Death of Materialism (Davies & Gribbin),  
247  
defeat, 22, 42, 44–47, 134–35  
Defense Advanced Research Projects  
Agency (DARPA), 199  
Defense/defense, 85, 252–53, 289, 304, 317,  
335, 346  
Defense Intelligence Agency (DIA), 198–99  
definitions, 18, 20, 63, 74, 78, 94, 98–99,  
268–69, 271–72, 320–21, 326  
circular, 147, 233  
in science, 63  
strict, 146  
degrees, 14, 52–53, 89, 92, 94, 182, 187,  
195, 243, 250, 257–58  
Democratic Party (US), 237  
Democratic Socialism, 39  
Democratic Workers Party (DWP), 265  
Democritus, 100, 140–44, 167–68  
demonstrations, 69, 71, 212, 216, 295  
Department, 18, 85, 197, 203, 252–53, 304,  
330, 344  
academic, 175

Defense, 255  
mathematics, 324  
philosophy, 77  
physiology, 218  
transport, 50  
depression, worldwide economic, 216  
descriptions, 61, 75, 81, 104, 139, 145,  
147–48, 154, 163, 197, 251  
descriptor, 117, 180, 182  
destiny, 75, 226–27, 229  
determinism, 131, 144, 150–51, 154–55  
development, 21, 33–37, 55–56, 59–60, 62,  
67–68, 70–72, 89–91, 93–94, 96,  
106–7, 109–10, 123, 132–34, 143–46,  
188, 223–24, 266–67, 269–71, 278  
economic, 59, 88, 289  
historical, 19, 35, 71, 123, 133  
inadequate, 30, 39, 54–55  
internal, 39, 95, 276  
social, 34, 61, 94, 133–34  
technological, 118, 254  
DIA (Defense Intelligence Agency), 199  
dialectical, 71–72, 103–4, 106, 109, 114,  
150, 152, 280, 286, 291, 321–23, 343,  
346  
Dialectical Biologist (Lewontin & Levins),  
29, 103, 250, 342  
Dialectical Materialism, 8–9, 29, 31, 56–62,  
74, 76, 79–83, 88, 116–18, 150–52,  
157, 238, 257–59, 314, 335–37, 343–44  
dialectical materialism  
and complementarity, 154  
first coined, 80  
and Modern Physics, 150, 337  
and Modern Science, 93, 333  
and Quantum Theory, 139  
dialectical materialism, and science, 5, 88,  
90, 351  
Dialectical Materialism for Dummies, 257  
dialectical materialists, 56, 60, 79, 155, 217,  
245  
dialectical method, 31, 34, 96, 102–3, 267,  
333  
dialectical principles, 99, 103–4, 107  
dialectical reason, 63–70, 72–73, 338, 348  
dialectical thinking, 86, 119, 153, 341, 351

Dialectic Facts for Kids, 258  
dialecticians, 14, 83, 87, 108–9, 154, 270  
dialectics, 5–7, 9–11, 18–33, 40–41, 55–57,  
59–62, 67–72, 79–83, 85–86, 103–4,  
237–40, 250–51, 257–59, 266–71, 280,  
287, 289–91, 334–36, 340–44, 347–49  
definitions, 29, 268, 338  
Global Warming, 257  
in Greece, 25–26  
of Hegel, 31, 40, 91, 150  
in Marxist movements, 33  
and materialism, 10, 61, 285  
method of Marx and Engels, 267–68  
and remote viewing, 7, 238  
report in National Joint Study, 287  
in science, 118, 334  
and society, 171, 338  
three laws, Engels, 29  
use, 27, 280  
wooden pseudo-Hegelian, 284  
dialectics of nature, 19, 69, 74, 88–90, 109,  
122, 217, 336  
dialogue, 3, 59, 64, 155, 202, 281  
differences  
    qualitative, 20, 100–101  
    quantitative, 91  
digital physics, John Archibald Wheeler,  
247  
dimensions, 73, 166, 183, 189, 227, 255–56,  
302  
disciplines, 10, 18, 44, 75, 114, 278–79  
Disclosure Project (UFOs), 309  
discovery, 21, 69, 72, 76, 92, 95, 114,  
141–42, 186, 188, 326–27  
    of atoms, 140, 339  
    of gravitational waves, 186  
    of new elements, 92  
distance, 81, 86, 148, 159, 184, 213, 277,  
322, 327  
DNA, 62, 160, 162, 176  
    structure and function, 162  
doctrine, 20, 69, 98, 107, 125, 140, 144,  
150–51, 246  
dogmas, 63, 77, 151, 191, 269  
dogmatism, 24, 274, 284–85, 288

domain, 72, 78, 111, 121, 130, 147, 159,  
161–62, 279, 302  
DSA (Democratic Socialists of America),  
237  
dualism, 92, 126, 128, 177–78, 190, 238,  
244  
DWP (Democratic Workers Party), 265  
dynamics, 65–68, 83, 91, 321, 323

**E**  
earth, 24, 123, 130–31, 134, 231–32, 246,  
253, 255–56, 299–300, 302, 308, 324,  
326  
Eastern Europe, parapsychology, 210, 215,  
277  
East Germany, 197, 215  
economy, 12, 38, 75, 113  
education, 54, 83, 211, 218  
Eight Martinis magazine (Daz Smith), 225,  
349  
electrons, 100, 108, 139, 141–42, 154,  
157–58, 160, 168, 170, 257–58, 327  
El Salvador, 239, 282  
Embodied Mind school, 85  
emergence, 65–68, 101, 106, 180, 216, 259  
empirio-criticism, 74, 77, 98, 128, 151–52,  
155, 168, 246, 324, 341  
enemy, 26, 35–36, 44–46, 135, 160, 213,  
286–87  
energy, 20, 58, 64, 119, 189–90, 202, 228,  
231–33, 238, 257–58, 321–23  
    dark, 139, 189, 347  
    potential, 322–23  
entities, 58, 67, 108, 117, 153, 157, 222,  
232, 234, 243, 322–23  
    experienced, 235  
    physical, 243  
environment, 103, 106–7, 110–11, 129, 183,  
186–87, 202, 265, 268, 328, 330  
Epicurus, atom theory, 167  
epiphenomenalism, 178, 244  
epistemology, 86, 118, 153, 156, 343  
Eritrea, 8, 240, 282  
errors, 43–46, 76, 239, 246, 282, 284–86,  
288, 290, 325, 329, 332  
    bourgeois, 277

factual, 109  
fatal, 267, 270  
ultra-left, 285  
ERV (Extended Remote Viewing), 205, 311  
ESP, belief in, 306  
essence, 20–21, 74, 76–77, 80, 92, 126–29,  
166–67, 169, 190, 280–81, 284–85, 288  
of consciousness, 190, 248  
human, 77, 314  
independent-of-matter, 127  
subtle, 91  
ET Bases (Pat Price), 311  
ethics, 63, 90, 93, 124, 344  
ETs, Cess Poole & Dirk Reynolds (humor),  
312  
ETs and telepathy, 305  
Europe, 24, 36–38, 59, 98, 120, 133, 135,  
211, 216, 242, 316  
European  
communist parties, 74  
doctrines, 38  
Marxists, 38–39  
Middle Ages, 18  
researchers, 212  
events, 105, 110–11, 141, 143–45, 151, 170,  
183, 202, 216–17, 276, 302, 304–5, 307  
reality undergirding atomic, 145  
sports, 252, 325  
unpredictable, 59  
well-documented UFO, 305  
evolution, 20–21, 101–3, 106, 111, 114,  
116, 133, 168, 202  
Evolution of Revolutionary Thought  
(Mugabane), 34, 342  
examples of dialectics, 26, 142, 343  
existence, 7, 42–44, 69, 71–72, 74–76,  
91–92, 120–23, 127, 130, 163–64,  
167–69, 223–24, 227–28, 247–48,  
306–7  
of atoms, 141–42  
bodily, 127  
conscious, 123  
of dialectical connections, 72  
of physical fields and principles, 220  
real, 75, 123, 184, 223  
of UFOs, 306–7

existentialism, 63–64, 73  
experiments, 139, 141–42, 145, 170,  
195–97, 200–201, 208, 211, 213, 215,  
217, 219–20, 318, 320, 323–26  
alphanumeric, 208  
analytics, 187  
outbounder, 196  
parapsychological, 215  
scientific, 48, 311  
shore-to-submarine, 219  
telepathic, 195  
in telepathy, 195–96  
explicate order (Bohm), 156, 159, 165–66,  
175, 249  
explosion, 77, 242, 292, 320  
Extended Remote Viewing (ERV), 205, 311  
extension, 104, 130, 162, 164, 187, 247  
external world, 100, 129, 153, 155, 178, 246  
eyes, 82, 84, 126, 132, 184, 189, 196, 232,  
234, 248–49, 251, 307  
**F**  
factors, 28, 94, 126, 133, 219, 223–24, 232,  
237, 270, 278–79, 286  
basic, 223  
economic, 61  
objective, 148, 268, 286  
political, 116  
real, 276  
scientific, 256  
failure, 10, 36, 47, 119, 240, 268, 271, 279,  
282, 286, 293  
fallacies, 61, 112  
ancient, 141  
falsification, 59–60, 217  
family, 18, 194, 328–30  
Faraday cage, 219  
fate, 95–96, 120, 217  
FBI, 195, 265–66, 329  
feudalism, 38, 54, 107, 134, 259  
Feynman lecture, energy and mass, 321  
fields, 8–9, 48–49, 90–91, 93, 95–97, 101,  
158, 162–63, 186–87, 219–20, 225–26,  
249–50, 253, 293, 322  
biomagnetic, 212  
complex, 112



continuous, 148  
 electromagnetic, 213  
 energetic, 231  
 esoteric, 304  
 magnetic, 149, 170  
 mental, 187, 248  
 oil, 197  
 physical, 220  
 quantum, 139  
 finances (ARV), 331, 340–41  
 findings, 7, 50, 206, 209–10, 213, 215,  
     238–40, 247, 252–53  
     experimental, 186  
     new empirical, 154  
     nonlocal parapsychological, 191  
     theoretical, 143  
 Findme Group (missing persons), 225  
 flesh, 96, 123, 231, 333  
 flows, 106, 132, 162, 167, 175, 225, 231,  
     299–300  
 flux, 14, 67, 162, 164, 249  
 flying, 10, 231, 256, 305, 320  
 Forbidden Science (Jacques Vallee), 198,  
     351  
 forces, 34, 40, 42, 44, 46, 70, 83, 90–91,  
     106, 108–9, 159, 247, 268, 283–84,  
     320–23  
     armed, 41–42, 47  
     creative Marxist socialist, 37  
     electromagnetic, 258  
     external, 119, 134, 320  
     gravitational, 322  
     main, 44–45  
     objective, 286  
     opposing, 40, 57, 67, 109  
     oppositional, 259  
     revolutionary, 37–38  
     subjective, 286  
     super-physical, 90  
     unifying, 235  
 forces and relations of production, 83  
 forecasts, 50, 92, 150  
 Foreign Technology Division (FTD), 199  
 formal logic, 18, 61–62, 82, 169, 240  
 formula, 90, 92, 314  
     epistemological, 314–15  
     from outside world to the brain, 315  
 Fourth Army (China), 41–42  
 France, 75, 154, 251–52  
 freedom, 43, 66–67, 110, 325  
 Freedom of Information Act Electronic  
     Reading Room, 312, 334  
 Freedom Road Socialist Organization. *See*  
     FRSO  
 Free Speech Movement, Berkeley, 179, 330  
 French Communist Party, 73  
 frequencies, 57, 100, 326  
     gene, 107, 109  
     vibration, 100  
 FRSO (Freedom Road Socialist  
     Organization), 9, 266, 280  
 FTD (Foreign Technology Division), remote  
     viewing, 199  
 Ft. Meade  
     Maryland, 198, 200, 203, 210, 251–52  
     team, 198  
     viewer Joe McMoneagle, 208  
     viewer Lyn Buchanan, 304  
     viewer Mel Riley, 304  
     viewers, 199, 252  
 Fugitive Location (Star Gate project), 197  
 function, 91, 97, 107, 117, 131, 153, 162,  
     164–65, 176, 184, 246–47  
     biological, 62  
     conscious mind, 181  
     recovery of, 52–53  
     subconscious brain, 202  
 functionalism, 174, 191  
 fundamental contradiction, 241, 288  
 Fundamental Problems of Marxism  
     (Plekhanov), 98, 126, 347  
 Future Forecasting Group, 225, 252, 254,  
     310, 323, 337, 349

**G**

Galactic Council, 304  
 Galactic Federation, 194  
 galaxies, 96, 149, 187, 227, 250, 302  
 Gallup polls, 306  
 game, 271, 293, 328  
 Gang of Four, China, 53  
 gaps, 14, 20, 55, 92, 102, 110, 144, 297

gas, 100, 151, 257–58  
Gaza, 256, 261  
General Dozier, search for, 197  
generalization, 90–92, 108, 286  
general relativity and quantum mechanics,  
139  
genes, 57, 107, 109, 299–300  
genetics, 97, 103, 216  
belittled, 58  
German Democratic Republic, 215, 316, 345  
German Ideology (Marx & Engels), 88, 122,  
344  
German philosophy, 123, 125  
Germany, 75, 124, 141, 171, 224, 251, 330,  
338  
Ghirardi-Rimini-Weber theory, 318  
glass, 29, 322, 326, 341  
globe, 239, 251, 266, 305, 307  
goal, 3, 107, 110, 154, 282, 298, 311  
basic, 241  
of philosophy, 298  
God  
exclusive, 120  
first, 120  
infinite, 189  
invoking, 250  
limiting, 120  
and Philosophy, 298  
government, 7, 66, 197, 241, 254, 256, 306,  
308, 315  
GPT-4, 59  
gradualism, 112, 266  
grain (dialectics), 24, 326  
Grammatology (Derrida), 294  
Grand Unified Theory, 258  
Grasping Revolutionary Theory (Silber),  
272, 349  
gravitation, 69, 149, 186  
contemporary physics, 69  
Great Depression, 328  
Greeks, 120, 126, 166, 326  
Grey Dude (Prudence Calabrese), 304  
groups, 56, 70–72, 194, 228, 237, 239, 252,  
262–66, 268, 270, 273–74, 276,  
282–85, 287, 323  
activist, 293

anti-Revisionist, 266  
guerrilla, 37  
meditation, 226  
progressive, 237, 262  
small, 7–8, 22, 113, 154, 198, 264–65, 282  
social, 187, 248  
growth, 9, 34, 49, 124, 176, 241, 256,  
267–68, 325  
of classes and class conflict, 34  
dynamic, 271  
inevitable, 268  
simple, 134  
steady, 279  
Guardian Newspaper, 272–73, 283–85  
guidance, 35, 141, 144, 179, 239, 273–74  
Guinea, 33, 35  
gut, 78, 244, 249  
**H**  
habits, 12, 103, 122, 162  
Hale-Bopp comet, 312  
Harvard University, 102–3, 170, 329–30  
Hawaii Remote Viewers' Guild method, 205  
heads, 26, 188, 191, 198–99, 203, 232, 234,  
240, 248, 253, 279–80, 304–5, 307  
human, 127  
healing, 231, 235  
by biofield, 214  
rhythm, 213  
health, 52, 54, 103  
practitioners, 216  
public, 102, 112  
heart, 11, 54, 78, 155, 221, 352  
heat, 89, 141, 257–58, 305, 326  
heaven, 123, 173, 315, 326  
Heaven's Gate cult, 312  
Hegel  
contradiction, 75  
dialectical method, 60  
dialectics, 60, 135, 170, 243, 258–59  
Doctrine of Essence, 20  
influence, 79  
principles, 121  
Hegelian-Marxist dialectic, 102  
Heisenberg, idealism, 153, 155  
Hellfire Remote Viewing Club, 310

heterogeneity, 57, 105, 107–8, 112  
     internal, 112  
 heuristic, 72, 157  
     procedure, 69  
     for science, 157  
 Higgs field, 172  
 Hilbert space, 172  
 historical materialism, 59, 74, 79, 88, 129,  
     135, 152, 259, 286, 334  
 history, 16, 20–21, 27–29, 59, 64, 67–71,  
     74–75, 77, 80–81, 86, 88, 107–9,  
     111–12, 114–15, 123–25, 140–43, 191,  
     194, 268–71, 277–79  
     of antithetical theories, 109  
     of class struggle, 107  
     human, 72, 139, 196, 336  
     of human knowledge, 23, 132, 135–36  
     of Ideas, 32, 344  
     intellectual, 293, 295  
     of nature and human society, 19  
     of parapsychology, 215  
     of philosophy, 58, 132, 315  
     revolutionary, 76  
     of science, 21, 93–94, 143, 154, 190  
     Socialist and Communist movements, 75  
     TransDimensional Systems, 252  
 homes, 54, 299, 304, 329  
 Hong Kong, 8, 18, 28, 330  
 house, 18, 195, 233, 237, 300, 329–30  
 HRVG (Hawaii Remote Viewers' Guild),  
     205, 251  
 human biomind, 218, 222, 350  
 humanities, 97, 120, 170, 173, 235, 293, 308  
 human knowledge, 23, 132, 135–36, 146  
 humans, 71, 115, 120, 145, 149, 185, 227,  
     233, 235, 242–43, 255–56, 300, 302  
 human society, 19, 21, 68, 81, 90–91, 94,  
     96, 113, 116–17, 168  
 human souls, 207, 221  
 Hungarian Uprising, 156  
 Hurun rankings (financial), 55  
 hydrogen, 24, 139, 257–58, 288  
 Hyperspace (Michio Kaku), 257, 340  
 hypotheses, 60, 69, 112, 115, 177, 187, 196,  
     202, 319

## I

idealism, 5–6, 10, 71, 99, 120–21, 126–29,  
     131–32, 169–70, 173, 238, 243, 280,  
     283  
     and consciousness, 6, 173, 194  
     and materialism, 99, 121, 131, 239, 243,  
     246  
     subjective, 129  
 idealists, 120, 123, 126–28, 132, 135, 149,  
     178, 207, 243, 246, 258  
 ideas, 39–42, 47–48, 59–61, 86, 88, 120–21,  
     123–25, 128, 140–42, 147–53, 157–59,  
     162–64, 177, 199–200, 242–43,  
     248–50, 259, 269–70, 287–88, 321–25  
     particles and waves, 151  
 identity, 18, 23, 31, 71, 77, 97, 99, 135–36,  
     169, 176, 288–89  
     of essence and phenomenon, 77  
     of opposites, 21, 135  
     primitive, 178, 244  
     of thinking and being, 121  
 ideology, 23, 29–30, 35, 42, 74, 104, 106,  
     116, 123, 157, 342  
     bourgeois, 216–17, 283, 290  
     individualist, 133  
     positivist, 103  
 ignorance, 85, 90, 92, 95–96, 219, 275, 281,  
     291–92  
     feigned, 85, 291  
 illusion, 18, 104, 121, 124, 191, 207, 210,  
     215, 313–14, 336, 345  
 images, 128–29, 163, 208, 214, 231, 246,  
     255  
     mental, 164  
     spiritual, 190, 248  
 imagination, 135, 144, 162, 211, 316  
 imperialism, 40–41, 44, 54–55, 134,  
     241–42, 262, 267, 270, 278–79, 315,  
     349  
     capitalist, 270  
 implicate order (Bohm), 158–59, 161–62,  
     164–66, 175, 333  
 implications, 10–11, 22, 39, 59, 77, 111,  
     159–60, 222, 224, 297, 302  
     for mind, 160  
     of psi, 222

subtle, 166  
superstitious, 220  
Inca communal economy, 38  
independence, 38, 106, 123, 159, 286  
    political, 34  
India, 30, 182, 207, 316, 346  
individuals, 90, 97, 105–6, 124–25, 194,  
    198, 279, 282, 311, 313, 315  
induction, 69–70, 115  
influence, 46, 65, 73, 103, 106, 126, 212,  
    217  
information, 8, 84, 158–61, 165, 180,  
    194–95, 200–203, 208, 222–23, 225,  
    228, 247, 249, 303, 305  
    accurate, 195  
    channeling, 223  
    impossible, 200  
    inaccurate, 214  
    noninferential, 202  
    psychic, 223  
    retrocausal, 203  
    useful, 84, 209  
Institute for Parapsychology, 217  
Institute of High Energy Physics, 313  
integration, 26, 158, 161  
intellectuals, 151, 276–77, 292, 294  
    elite, 296  
    left, 297  
intelligence, 12, 79, 117, 161, 227  
    artificial general, 185, 255  
intelligence agencies, 196, 199  
intentions, 64, 187, 215, 233, 248  
interactionism, 177–78, 244  
International Remote Viewing Association  
    (IRVA), 230, 251, 339  
International Remote Viewing Association's  
    PsiFest, 308  
International School of Clairvoyance, 230  
internet, 170, 199, 238  
interpenetration, 62, 106, 111–12  
    of opposites, 19, 69, 112  
    of parts and wholes, 106  
interpretations, 61, 139, 145, 147, 149–50,  
    152, 154, 157, 169–70, 201–3, 318–19  
    causal, 158  
    incorrect Marxist, 58

    of quantum mechanics, 145, 246, 318, 348  
    reductionist, 223  
    statistical, 150, 318  
    stochastic, 318  
interstellar object, 310  
intervention, 77, 107, 140, 240, 295  
intuition, 83, 95, 176, 198  
Iran hostages, 197  
Iraqi Exocet attack, 197  
IRVA (International Remote Viewing  
    Association), 230, 251, 339  
isolation, 35, 94–95, 104  
Israel, 211, 256, 316, 330, 346  
IWK (I Wor Kuen), 278, 283–84

## **J**

Japan, 41–42, 168, 211, 251, 288  
    feudal, 134  
    imperialist, 42–43, 134, 343  
    invasion, 52, 241  
Japan Airlines Flight 1628, 305  
Jellyfish UAP, 310  
journals, 4, 9, 31–32, 103, 175, 187–88, 248,  
    294, 336, 344, 351  
Jupiter, 102, 200  
justification, 14, 147–48, 165, 272  
    logical-philosophical, 148

## **K**

Kant  
    categories, 70  
    transcendental subjectivism, 77  
Kazakh Soviet Republic, 220, 339  
Keeping Vegetables Fresh (dialectics), 50  
KGB, 207–10, 214–15  
    chairman, 214  
    Generals, 208  
    Ratnikov, 209  
    rule, 214  
Khrushchev, 207  
kids, 6, 257–58, 329–30, 336, 340  
knowledge, 21–22, 49, 58–60, 71–72,  
    90–92, 100–101, 104–5, 114–16,  
    131–32, 152–53, 164, 226–27, 249,  
    275–76, 280–81, 284–85, 292, 314–15  
    conceptual, 281

content, 114, 118, 164, 249  
first-hand, 274  
of objective reality, 132  
perceptual, 132, 280–81  
rational, 132, 314  
reflective, 164  
true, 161–62  
Kremlin, 302  
  leadership, 215  
Kulagina experiments, 212  
Kuomintang, 22, 44, 48, 241  
  areas, 44  
  army, 44–45  
  forces, 44, 54  
Kursk submarine disaster, 209

## L

labor, 31, 88, 97, 105, 114, 124–25, 259,  
  290  
  estranged, 31  
language, 9, 84–85, 123, 125, 173, 179, 294,  
  296, 298, 300, 305  
  distorted, 125  
  non-human, 303  
  ordinary, 125  
  of real life, 123  
language philosophy, 85, 179  
Latin America, 37–39  
  Marxist Theory, 37, 333  
laws, 15, 18–21, 29, 33–34, 49–50, 52–54,  
  57–58, 60–62, 69–72, 90–91, 104,  
  108–9, 143–45, 167, 169, 189, 240,  
  319, 321–24, 327  
  atomic, 323  
  biological, 96  
  of chemistry and mechanics, 91  
  and constants of nature, 189  
  contingent, 69  
  dialectical, 19–20, 29, 70, 81, 238  
  dialectical reason, 70  
  dialectics of nature, 81, 109  
  formal logic, 169  
  fundamental, 20, 52, 142, 176  
  general, 19, 34, 68, 130  
  of identity, 119, 169  
  inverse-square, 322

  of motion, 259, 314  
  physico-chemical, 72  
  physics, 220  
  of thought, 20, 69  
  universal, 69–71  
  of weather changes, 50  
leaders, 40, 45, 47, 79, 103, 114, 189, 239,  
  265–66, 276, 304  
leadership, 36, 129, 266  
League of Revolutionary Struggle (LRS),  
  277, 341  
Left and Right in theory and practice, 289  
leftism, 37, 241, 285–86  
  in form, 284  
  parties, 37  
  phrase-mongers, 272  
  of PWOC, 289  
  PWOC self-criticism, 345  
  and remote viewing, 7  
  ultra-Leftism, 285  
LEM (Law of Excluded Middle), 14–15, 19,  
  62, 240  
Leningrad, 208, 212, 218  
Leningrad Brain Research Institute, 218  
Leninism, 29, 45  
Leninist vanguard party, in Peru, 38  
letter  
  by Althusser, 76  
  by Engels, 88  
  to Gorky, 15–16, 78  
  to Merab Mamardachvili, 332  
letters, 15–16, 19, 52, 76, 78, 88–89, 152,  
  155, 160, 287, 294, 327, 332  
level, 68, 70, 74–76, 79, 105, 108, 111–12,  
  160–61, 184, 187, 226–27, 256, 259,  
  327  
  atomic, 152, 323  
  cellular, 156  
  fundamental, 139, 158, 327  
  higher, 101, 111, 158, 161, 179, 267, 269  
  higher spiritual, 226  
  lower, 111, 182  
  macroscopic, 139  
  of organization, 57, 108, 112  
  of productive forces, 35  
  subtle, 161

Liberal rhetoric, 286  
Liberals, 107  
Liberation Road, 9, 266  
Libyan PLO Building, 197  
life, 12, 29, 31, 62, 74, 77–79, 95–97,  
99–100, 122–25, 162, 187–88, 227–28,  
233, 250, 327–28  
better, 30, 39, 54–55  
biological, 189  
everyday, 60, 239, 251  
psychic, 131  
real, 21, 123  
social, 31, 34, 122  
lifetime, 122, 139, 215, 223, 316  
light, 97, 104, 108, 152, 154, 165, 170, 226,  
304–5, 307, 326, 328, 330  
beings, 97  
frozen, 97  
red, 189, 248  
Li Li-san line, 45–48  
links, curated, 204, 311, 348  
Lithuania, 317, 346  
living organisms, 151, 187, 213, 250  
LLM (Large Language Model), 185  
logic, 5, 14–15, 19–20, 60, 165, 168, 239,  
319, 322, 325, 342  
fuzzy, 14, 61–62  
many-valued, 239  
modal, 14  
standard, 62  
two-valued, 239  
logicians, 80, 102, 110  
London bus drivers, 101  
Long March (China), 43, 45  
losses, 42, 44–45, 48, 107, 188, 202, 219,  
271, 277, 286  
lottery, 230, 331, 340–41  
LRS (League of Revolutionary Struggle),  
277–80, 341  
LSD (lysergic acid diethylamide), 330  
Lumi (AI agent), 59  
Lysenko period, 116

## M

Mach, empirio-criticism, 152  
machine, 64, 144, 232

computing, 319  
self-organizing abstract, 299  
machinery, 62, 319, 322  
Manhattan Project, 247  
mankind, 24, 36, 121, 129, 165–66, 168, 228  
Mao  
contributions, 289, 335  
and Deng, 87, 335  
exchange of place in contradictions, 289  
his contributions, 27, 239  
and Lenin, 76  
lifetime, 313  
oversimplifies, 280  
on principles and flexibility, 288  
warnings about capitalist roaders, 242  
Maoism, in China, 30  
Mao Zedong on Dialectical Materialism (N.  
Knight), 31, 340  
map, 76, 86, 163, 209, 330  
Mariátegui and Latin American Marxist  
Theory, 37, 333  
market, 51, 54, 105  
free, 117, 295  
international capitalist, 39  
Mars, civilization, 305  
Martians and UFOs, 194  
Marx  
originality, 71  
Second Thesis on Feuerbach, 77–78  
Marxism, 7–9, 36–39, 44–46, 63–64, 73–74,  
78, 80–81, 93–95, 98–99, 115–16,  
118–20, 152, 155–56, 169–70, 237–38,  
264, 273, 288–89, 328–30, 343–45  
academic, 73  
and consciousness, 9  
lack of knowledge of, 275  
materialism, 10, 38  
mechanistic, 73  
modern, 72, 96  
movements, 8, 33  
and natural science, 118, 343  
for Newbies, 257, 261, 343  
opponents, 155  
orthodox, 37  
orthodoxy, 118, 343

philosophy, 8, 22, 78–79, 98, 117, 154,  
 169, 217, 273, 338  
 philosophy and science, 156  
 physicists, 117, 154, 167, 169  
 post-war Eastern European, 118  
 principles, 99, 285–86  
 revolutionaries, 33  
 revolutionary movement, 267, 269  
 and science, 78, 93  
 scientists, 95, 117–18  
 scientists and intellectuals, 151  
 and Soviet science, 118, 343  
 study by Workers and Peasants, 48, 349  
 study groups, 8  
 study of, 98, 244, 280, 335  
 theoretical foundations, 73  
 theory of knowledge, 280  
 world outlook of dialectics, 133  
 Marxism-Leninism, 8, 23, 26, 132, 136, 270,  
 273, 275–78, 282, 286–87, 289  
 Marxism-Leninism-Mao Zedong Thought,  
 266  
 Marxist  
 campaign for complementarity, 155  
 class analysis of Peruvian society, 39  
 dialectics, 135, 140, 239, 243, 257, 269,  
 302  
 thought, 8, 36–37, 58, 60, 73, 90, 154  
 viewpoint, 273  
 Marxist approach, 20, 72, 114, 116, 118,  
 329, 335  
 Marxist Facts for Kids (web site), 258  
 Marxist Internet Archive (MIA), 29, 41  
 Marxist-Leninist, principles, 284  
 Marxist-Leninist Education Project, 280,  
 343  
 Marxist-Leninist Organizing Committee  
 (MLOC), 283  
 Marxist-Leninist Party (MLP), 265–66, 283  
 Marxist-Leninist party (Mozambique), 36  
 Marxist-Leninist Party, genuine, 268, 283,  
 287  
 Marxist-Leninists, 30, 35, 44, 129, 264, 273,  
 276–77, 280, 282, 335, 341  
 leading, 276  
 open, 257  
 orthodox, 215  
 Marxist-Leninist study groups, 272, 349  
 Marxists, 9, 11, 18–19, 27, 71, 73, 78–79,  
 81–82, 98, 113–14, 116–17, 120,  
 154–56, 242, 245–46  
 Marxist theory, 37–38, 73, 78  
 Marx's dialectics, 267, 269  
 masses, 35–36, 38, 41–42, 47–48, 66, 108,  
 142, 245, 266, 270–71, 289, 320–23,  
 329  
 of atoms, 97  
 field-creating, 149  
 great, 41, 294  
 liquid, 300  
 of workers and peasants, 48  
 material  
 objects, 161, 232, 242  
 particles, 148  
 reality, 141, 228, 233, 321  
 world, 62, 86, 153, 227, 232, 259, 288  
 materialism, 5–6, 8–10, 81, 98–99, 101,  
 120–21, 125–29, 131–33, 150–53,  
 173–74, 188–89, 191–92, 222–23,  
 237–38, 243, 246–48, 258–59, 314,  
 336–38, 347  
 anti-dialectical, 99  
 beyond, 243  
 credit crunch (Sheldrake), 189  
 and empirio-criticism (Lenin), 74, 77, 98,  
 128, 151–52, 155, 168, 246, 324, 341  
 historical, 79–80, 83  
 history, 125, 128, 347  
 and Idealism, 126, 129, 191, 334  
 in Marxism, 31  
 matter, 155  
 mechanical, 132–33, 152, 280, 343  
 origin of, 83  
 promissory, 188, 190–91  
 scientific, 151, 155, 220  
 vulgar, 190  
 materialist dialectics, 72, 103, 111, 133–34,  
 145, 289, 335  
 materialists, 10, 12, 120, 124, 126, 128, 131,  
 174, 176, 188–89, 243, 245, 248  
 dogmatic, 191  
 emergent, 158

mechanistic, 100  
 scientific, 192  
 mathematics, 21, 27, 88, 97, 153, 156, 201, 297, 322  
 matter, 20–22, 89–92, 99–101, 106, 108, 119–20, 122, 126–31, 140–42, 144–45, 152, 154–55, 157–60, 164–66, 168, 188–92, 246–49, 257, 259, 319–21  
   and consciousness, 165  
   dark, 139, 189  
   inorganic, 24  
   living, 90  
   mind enfolds, 166  
   nuclear, 322  
   organic, 24  
   physical, 152, 222  
   unknown, 92  
 McCarthyism, 331, 338  
 MCLL. *See* Motor City Labor League  
 mechanics, 21, 89–91, 144, 246, 318, 337  
 medicine, 27, 105, 216, 218  
 memories, 97, 165, 250, 325  
 Mendeleev's predictions, 20  
 Mendelian genetics, 56  
 mental  
   activity, 161, 177, 187, 190, 248  
   phenomena, 180, 190–91, 244, 248  
   suggestion, 219, 221  
 mental radio, 7, 195  
 metaphors, 85, 319, 345  
 metaphysics, 12, 18–19, 21, 24–26, 83, 123, 133, 135, 151, 186, 333  
 methodology, 28, 102–3, 111, 115, 167–68, 273  
 methods, 26, 40–42, 46, 49, 51–52, 71–72, 82, 84, 91–94, 96, 98, 199–200, 204–5, 210, 237–38  
   freestyle/natural, 205  
   regressive-progressive, 70  
   of remote viewing, 311  
   of resolving contradictions, 51, 135  
   statistical, 94  
 MIA (Marxist Internet Archive), 29, 41  
 Middle Ages, 24–26, 102, 121  
 military-industrial complex, 114  
 mind, 96–98, 122, 128, 130–31, 152, 156–58, 160, 162, 164, 166, 172–74, 179–82, 186–91, 228–30, 233–34, 243–44, 246–47, 249–50, 303, 315  
   and body, 166, 180, 182, 233, 239, 243–44, 246, 341  
   dance of the, 164  
   human, 94–96, 130, 153, 188, 325  
   images, 121  
   macroscopic phenomenal, 178  
   and matter, 158  
   nonlocal, 191  
   of observers, 189  
   states of, 190  
 mind-body, problem in India, 182  
 mind-to-mind communication, 303  
 Minkowski, 186, 201  
   spacetime, 172  
 minorities, 94, 266, 283  
 mistakes, 20, 22–23, 26–27, 44–45, 47–48, 69, 98, 136, 148, 265–66, 284  
 MLEP (Marxist-Leninist Education Project), 280–81  
 MLOC (Marxist-Leninist Organizing Committee), 283  
 models, 37, 62, 76, 154, 172, 201–3, 242, 254, 281  
   classical, 201  
   conceptual, 190, 248  
   correct, 242  
   geometrical, 201  
   known LLM, 255  
   large language, 59, 185, 254  
   old Cartesian, 156  
   physical, 27  
   process-oriented, 202  
   psychophysical identity, 190  
   two-stage, 281  
 molecules, 20, 89, 168, 170, 174, 176, 180, 187, 250, 257, 323  
   and atoms, 168  
   complex, 254  
 momentum, 104, 157, 320, 324  
 monism, 126, 177–78, 238, 244, 341  
 moon, 120, 144–45, 149, 227, 233, 305, 310  
 morphic fields, 187, 248–49



Morphic Fields and Extended Mind (Watts), 187, 351  
Morse code, used in psi experiment, 208  
Moscow, 38, 208, 211–12, 214–15, 219, 221  
Moscow-Leningrad experiments, 211  
motion, 20, 22, 89, 108, 114, 122, 134, 141, 258–59, 314, 320, 323  
    and development, 134  
    mechanical, 134  
    natural, 227  
    predetermined, 144  
Motor City Labor League (MCLL), 271–72, 344  
movement, 7, 22, 51–52, 71, 73–74, 78–79, 132–33, 144, 159–60, 162–64, 166, 226–27, 239–40, 265–67, 282–85  
    anti-revisionist, 265–66, 278, 284  
    historical, 269  
    party-building, 237, 266, 282, 330  
Mozambican revolutionary movement, 36  
Mozambique, 33, 35–36, 342  
MULC (MultiLateral Conference), 290  
MultiLateral conference, 290, 332  
multiverse, 298, 310, 338  
mystery, 139, 178, 304, 326  
mysticism, 157, 170, 207, 214

## N

NASA, 304, 315  
NASA satellite, and Saturn, 200  
National Interim Committee (Revolutionary Union), 284  
nationalism, 37, 66, 284  
National Joint Study (NJS), 6, 282, 287, 345  
National Labor Relations Board (New Deal), 113  
National Security Agency (NSA), 196  
natural laws, 24, 81, 117, 142, 144–45, 153  
natural science, 81, 89–90, 92–93, 100, 104, 116, 118, 130, 168–69, 216–17, 339, 343  
nature, 19–21, 58, 60, 68–71, 74, 80–82, 88–90, 94–95, 98–99, 108–12, 116–22, 126–27, 134–36, 140–44, 148, 152–53, 156–62, 166–68, 319, 323–24  
    chemical, 89, 142

    class, 315  
    inanimate, 72  
    inorganic, 72  
    interconnected, 60  
    living, 130  
    mental, 190  
    non-human, 89  
    processual, 86  
Navy FLIR radar (Tic-Tac UFO), 304  
NCM (New Communist Movement), 6–8, 84, 264–66, 268, 270, 273, 282–83, 285, 288  
necessity, 25, 46, 70–71, 96, 100, 122, 127, 144, 166, 278  
negation, 15, 18–19, 25–26, 29, 58, 69–70, 101, 104, 240, 267–68, 271, 301, 336  
    negation of the, 31, 82, 240  
Negative Dialectics (Adorno), 85–86, 332  
negative feedback, 110  
nerves, 51, 96, 109  
nervous system, 27, 158, 164–65  
neurons, 16, 184, 249  
neuroscience domain (May and Marwaha), 202–3  
neutrinos, 139, 258, 293  
neutrons, 139, 142, 288  
Newbies (in remote viewing), 257, 261, 343  
New Communist Movement. *See* NCM  
New Materialism, 6, 238, 298  
New Materialists, 10, 301  
newspapers, big-character wall, 27  
Newton  
    concepts, 158  
    discovery, 69  
    equations, 325  
    laws, 114, 314, 321, 323–24  
    mechanics, 168  
    physics, 159  
    theory, 148, 161  
    Bohm on, 158–59  
    Principia, 114  
New Voice, 282, 289, 351  
New York, 33, 113, 196, 211, 252, 270, 273, 277–78, 302, 334, 350  
Nexus magazine, 303, 341  
NHI (non-human intelligence), 303

Nimitz (Tic-Tac UAP), 310  
NJS. *See* National Joint Study  
Nobel Prize, 63, 188  
Non-disclosure Agreements, 206  
non-locality, 158–59, 200  
NSA facility  
    remote viewing of, 196  
    Top Secret, 180  
nuclei, 142–43, 154, 257–58

## O

objective reality, 51, 99, 101, 120, 132,  
    144–45, 153, 272, 315  
objects, 15, 18–19, 74, 76–77, 86, 104–10,  
    126–28, 146–47, 162–63, 183, 208,  
    242, 245, 307, 320–23  
    alienated world, 106  
    inanimate, 89  
    left-alone, 245, 322  
    multidimensional, 105  
    sensuous, 122  
    viewing, 319  
observations, 96, 115, 123, 146, 157,  
    162–63, 176, 280, 307–8, 311  
    empirical, 60  
    experimental, 170  
observers, 153, 162–63, 189, 195, 307  
occult, 221, 348  
Occult Communism (Ivanova), 220–21, 339,  
    351  
October Revolution, 207, 240–41  
Oiroi people (Mongolia), 207  
OL (October League), 283–85, 289  
ontology, 70, 86, 153, 156, 184, 191  
    entailment, 175  
    of materialism, 191  
Opium War, 41  
opportunism, 44–45, 48, 132, 135, 279, 283,  
    285  
    Left and Right, 289, 345  
    Li Li-san, 43, 47  
opposites, 19, 21, 23, 25–27, 31, 52–53,  
    99–101, 107–8, 112, 127, 133, 135–36,  
    286–90  
    establishing, 27  
    interpenetration of, 70, 111–12

    in struggle and unity, 286  
    unity and identity of, 82  
opposition, 46, 58, 71, 86, 96, 104, 124, 128,  
    155, 276–77  
    of materialism to idealism, 128, 153  
order, 69–70, 72, 94, 111, 113, 142, 148,  
    154, 164–66, 216, 325  
    cosmic, 83  
    feudal, 38  
    macroscopic, 159  
    rational, 83  
    reverse, 114  
    symbolic, 86  
organisms, 58, 89, 106, 108, 110–11,  
    130–31, 187, 190, 212–13, 248, 250  
    biological, 224  
    evolutionary theory, 106  
    larger, 187, 250  
organization, 8–9, 108, 111–12, 131, 135,  
    184, 202, 204, 265, 270–71, 274,  
    276–79, 282–83  
    of phenotypic variability, 112  
    pre-party, 266  
origin, 32, 62, 93, 95–96, 117, 124, 163,  
    168, 299, 305, 325  
    biological, 219  
    petty-bourgeois, 119  
    ultimate, 153  
overdetermination, 74–76, 78–79, 178, 242  
oxygen, 257–58, 288, 300, 326

## P

Pacific Collective, 289, 345  
pamphlets, 30, 48, 264, 282, 284, 287  
Pandora's Box, 6, 97, 237, 239, 254–56  
panpsychism, 178, 249  
paranormal, 212, 317, 346  
    experiences, 223  
    occurrences, 215  
    phenomena, 207  
    remote viewing, 310  
    in Russia, 306  
Paraphysics Group, 313  
parapsychologists, 208, 217, 223–24, 315

parapsychology, 3, 6, 203, 205, 210–11,  
     215–17, 220–21, 223–24, 313–15, 317,  
     338–40, 345–46, 348  
   in China, 313  
   in Eastern Europe, 210  
   experiments, 218  
   in Germany, 171, 338  
   golden age, 207, 215  
   in Russia, 207  
 Parapsychology Association, 230  
 parents, 8, 18, 52, 130, 232, 328–30  
 Paris, 29, 73, 210–11, 216, 219, 296, 305  
 particles, 95, 100, 139–40, 150–53, 157–60,  
     163, 170, 247, 249, 319–20, 322–24  
   atomic, 162  
   elementary, 91, 142, 153, 160, 163, 168,  
     326  
   subatomic, 187, 250, 258  
 particularity, 23, 50–51, 136  
 Partido Unificado Mariáteguista, 37  
 party, 28, 33–34, 37, 40–44, 47–48, 237,  
     239, 241, 264–66, 268, 287, 289, 292  
   communist, 44, 278  
   revisionist, 283  
   self-declared, 266  
   third, 316  
 party building, 273, 289, 342  
   mania, 266  
 path, 8, 11, 119, 169–70, 232, 256, 268, 319  
 pathways, 110, 249–50  
 Patreon subscribers (Future Forecasting  
   Group), 252  
 patterns, 59, 162, 165, 179, 184–85, 196,  
     214  
   complex, 184  
   interference, 170  
   land-holding, 39  
 Pavlita, PK demonstrations, 212  
 peasants, 5, 24, 34, 37–38, 42, 48–50, 52,  
     239, 241, 251, 349  
 Penrose interpretation (quantum mechanics),  
     318  
 Pentagon, 198, 303–4, 315  
 People's Liberation Army, 41  
 People's Republic of China, 28, 313, 335,  
     347  
 perceptions, 129, 131, 148–49, 164, 184–85,  
     187, 201, 228, 232–33, 248, 280  
   dermo-optic, 211  
   extrasensory, 216, 231  
   intelligent, 163  
   of reality, 330  
   and thoughts, 228, 233  
   visual, 189, 219, 248  
 perceptual experience, 132, 173  
 personal experiences, 47, 223, 235, 311  
 perspective, 5, 8, 11, 56, 110–12, 137, 140,  
     145, 246, 249, 251, 274, 277  
   critical, 215  
   evolutionary, 202  
   of historical materialism, 88  
   mainstream, 120  
   sociological, 103  
 Peru, 33, 37–39  
 Peruvian Communist Party, 37  
 Peruvian Socialist Party, 38  
 Peruvian society, 38–39  
 PFOC (Prairie Fire Organizing Committee),  
     283  
 phenomena, 57, 74–75, 77, 84, 89–92,  
     94–95, 104–5, 128, 130, 169, 176,  
     186–87, 220–22, 303, 307–8  
   atomic, 94, 145  
   bioenergo-informational, 190, 248  
   chemical, 91  
   collective, 95  
   contradictory, 169  
   intellectual, 190  
   nuclear, 95  
   psychic, 126, 130–31, 192, 214, 246, 314,  
     347  
   social, 65, 67–68, 91, 117, 183  
 Philadelphia Workers Organizing  
   Committee (PWOC), 283, 345  
 philosophers, 21–22, 60–61, 78–79, 83, 85,  
     98–99, 121, 125–26, 173, 175–76,  
     179–81, 191, 222, 245–46, 320–21  
   classical, 128  
   contemporary, 102  
   criticizing, 323  
   idealist, 129  
   mainstream, 129

and scientists, 246  
 philosophy, 7–8, 14–16, 22, 58–60, 63–64,  
 73–74, 76–80, 82–86, 120–21, 123–24,  
 128–30, 167–68, 173–74, 267–70,  
 291–93, 295–96, 298, 301–2, 328,  
 348–50  
 20th-century French, 63  
 academic, 22, 78, 98, 244  
 analytic, 18, 80, 85, 330  
 Aristotle, 98  
 Feuerbach, 127  
 Hegel, 60  
 idealistic, 126  
 limits of, 84  
 linguistic, 84–85  
 Marxism, 16  
 Marxism-Leninism-Maoism, 29, 349  
 of mind, 156, 173, 179  
 of Mind and Language, 179  
 political, 98, 251  
 and psi, 302  
 of science, 112, 114, 118, 157, 192,  
 349–50  
 social, 80, 179  
 Socrates, 98  
 Phobos, 310  
 Phobos II, 310  
 Phoenix Lights, 304, 310  
 physical  
   laws, 150, 231, 319–21, 323, 326–27  
   processes and consciousness, 174  
   systems, 153, 174  
   world, 105, 109, 175, 177–79, 203, 220,  
   222, 322  
 physicalism, 189, 191, 246  
 physicists, 141–46, 149, 154–55, 157, 169,  
 177, 186, 189, 242, 247, 318–19  
 20th-century, 246  
   atomic, 153  
   modern, 146, 246  
   mystical, 96  
   nuclear, 191  
   pioneering quantum, 249  
 physics, 89–91, 96, 101, 139–44, 148–50,  
 153–54, 156–59, 176–77, 186–87, 189,  
 200–201, 247, 319–20, 324–26,  
 336–37, 347  
 and chemistry, 141, 180, 188  
 classical, 154, 160, 324  
 digital, 247  
 high-energy, 314  
 lectures on, 327  
 nuclear, 27, 143  
 particle, 158  
 and politics in revolutionary Russia, 156,  
 340  
 reductionist, 236  
 physics domain (May and Marwaha), 202–3  
 physiology, 90–91, 97, 100, 218  
 picture, 42, 93, 116, 128, 144, 153, 181,  
 231, 247, 330  
 pilots, 106, 209, 305–6  
 PK (psychokinesis), 196, 208, 212, 313  
 Planck length, 250  
 planes, 89, 197, 209, 232, 298  
 planets, 102, 130, 144, 149, 226, 228, 235,  
 239, 299, 302, 306, 308, 310  
 plants, 49, 53, 112, 134, 272  
 PLP (Progressive Labor Party), 265–66,  
 282, 284, 288  
 polemics, 270, 283–84  
 Political Bureau (China), 42–44, 46, 48  
 Political Economy (Marx), 122, 343  
 political line, 35, 43, 135, 266, 272, 279,  
 282–83, 285, 344  
   correct, 285  
   developed, 274  
   developing, 246  
   incorrect, 41, 285  
 politics, 24, 80–81, 123, 156, 171, 331,  
 340–41  
 polls, 306, 318  
 populations, 34, 56, 58, 109, 112, 210, 246,  
 265, 272, 294  
   human, 102  
   world's, 8, 292  
 positivists, 71, 145, 149, 155  
 postmodernism, 291, 298, 334  
 potentialities, 94, 157, 159, 302  
 POUs (points of unity)(National Joint  
 Study), 287

power, 22, 31, 38, 40–41, 51, 54–55, 63,  
     65–66, 214, 216, 239, 241, 271  
     causal, 184–85  
     greatest predictive, 167  
     negative bio-energetic, 213  
     people's, 36  
     psychokinetic, 213  
     supernormal, 195  
     telepathic, 195  
 practice, 7–8, 14, 22–23, 75–77, 98–99, 124,  
     131–32, 175, 237–38, 240–41, 273–74,  
     276–77, 280–81, 284–87, 314–15  
     actual, 274–75  
     collective, 273  
     fostered capitalistic, 241  
     of philosophy, 76, 78  
     reductionist, 106  
     revolutionary, 14, 29, 35–36, 79, 298  
     social, 105, 132, 314–15  
     theoretical, 276  
 practitioners, 196, 200, 243, 295  
 Pragmatism, American, 186  
 Prairie Fire Organizing Committee (PFOC),  
     283  
 praxis, 63, 71–72, 78, 220, 339  
 precognition, 187, 202–3, 211, 248, 344  
 predicting outcomes, 230, 252, 331, 340–41  
 predictions, 92, 94, 104, 111, 115, 145, 170,  
     183, 197, 316, 325  
     accurate, 254  
 premises, 10, 35, 121, 123, 182, 247  
     anti-revisionist, 284  
 principal aspect, 23, 49, 52–53, 136, 275,  
     288  
 principal contradiction (PC), 33–34, 36, 39,  
     41, 50, 238, 240, 242–43, 262–63,  
     273–77, 280, 288–89, 335  
 principal contradiction  
     China, 30  
     CPC in 1981, 54  
     examples, 40, 49, 51, 53  
     Li Shao-Chi on, 30  
     Mao on in 1957, 28  
     new, 30  
     world, 6  
     Xi Jinping on, 30  
 principle of causality, 143–44  
 principle of complementarity, 139, 148, 151,  
     170  
 principles, 15, 18, 45–46, 57–58, 83,  
     98–100, 103–5, 107–9, 113–14,  
     146–48, 165–67, 178–79, 220, 238,  
     288–89, 292–93  
     adaptionist, 58  
     correct, 46  
     of dialectics, 104, 240  
     epistemic, 109  
     of living organisms, 187, 250  
     opposing, 111  
     physical, 174  
     primitive, 108, 176  
     second, 100, 106  
     simple, 12, 179  
 probabilities, 69, 170, 208, 214, 325  
 problems, 27, 33–36, 43–44, 48–49, 51–54,  
     74–75, 82–84, 86, 95–96, 111–13,  
     115–16, 125, 141, 143–44, 190–91,  
     244–45, 273–75, 278–79, 292, 294–97  
     complex, 96  
     hard, 173–74, 189, 248  
     homunculus, 184  
     insoluble, 98, 244  
     primary, 51, 53  
     scientific, 98, 109  
     secondary, 51, 53  
 processes, 21, 23, 34–36, 40–41, 57–61,  
     70–71, 77, 84–85, 104, 107–8, 111–12,  
     114–15, 120–21, 132, 136, 163–67,  
     184–86, 202–3, 250–51, 314–15  
     chemical, 90, 102, 141–42  
     cognitive, 186  
     complex, 50, 67  
     complex organic, 91  
     destabilizing, 110  
     deterministic, 111  
     dynamic, 60, 67  
     energo-informational, 190, 248  
     mental, 160, 180, 187, 231, 248  
     natural, 144  
     neurophysiological, 180, 190, 244, 248  
     opposing, 108–10  
     party building, 273

physical, 174  
physiological, 91, 190  
simple, 199, 267  
of thought, 160, 219, 249  
total, 164, 249  
unconscious, 160  
production, 48, 62, 74, 83, 94, 114–15,  
122–25, 133–34, 259  
social, 28, 54, 122  
productive forces, 34–35, 123–24, 134, 241,  
259  
program, 3, 147–48, 184–85, 195, 199, 203,  
208, 210, 279, 283, 308  
computerized psychological testing, 209  
government-sponsored research, 194  
intelligence operations, 308  
intensive training, 194  
operational, 307  
psychic spying, 197  
Star Gate, 191  
Progressive Labor Party (PLP), 265, 282  
project, 166, 184, 188, 196, 198–99, 215,  
256, 311, 328  
project Star Gate, 194  
proletariat, 28, 30, 38, 40, 52, 71–72, 78,  
270, 276, 278, 289  
indigenous, 38  
industrial, 78, 133  
working-class, 37  
Promissory Materialism and Second Coming  
Messianism (Tafarella), 190, 351  
properties, 99–101, 104–6, 127, 157, 170,  
172, 174, 178, 254, 326  
abstract, 102  
genetic, 107  
new, 106, 158–59  
ontological, 109  
physical, 90, 174–75  
protophenomenal, 177–78  
statistical, 170  
propositions, 15, 19, 61, 76, 108, 129, 181,  
190–91  
binary, 62  
contradictory, 19  
fundamental Marxist-Leninist, 274  
psychophysical identity, 190

scientific hypotheses, 61  
protons, 139, 142, 258, 288, 327  
Provisional Organizing Committee (POC),  
268, 282  
PRRWO (Puerto Rican Revolutionary  
Workers Organization), 283–85  
psi, 3, 6–7, 84, 180–81, 204–5, 207–8, 215,  
218, 222–23, 243, 246, 318–19, 325,  
327  
early research, 207  
experiments, 207  
faculties, 223–24, 350  
military use of, 208, 344  
modalities, 252  
Presumably Gifted Teenager in China,  
315, 336  
psychic warfare, 207, 210, 215, 313–14,  
336, 345  
relationship of parapsychology to  
communism, 220, 340  
and remote viewing, 120  
in Russia, 6, 207  
psychic abilities, 90, 196, 213, 231  
psychical research, 187, 192, 230, 314–15,  
350  
psychoenergetics research, 313, 347  
psychokinesis, 187, 191, 196, 208, 210–12,  
218, 248  
psychology, 27, 84, 90, 116, 146, 149, 162,  
171, 189, 200, 230  
psychotronics, 207, 211–12, 215  
Puerto Rican Revolutionary Workers  
Organization (PRRWO), 283–85  
PUL (Proletarian Unity League), 289  
PWOC (Philadelphia Workers Organizing  
Committee), 283, 345

## Q

QI, exploration of in China, 251  
qualitative changes, 20, 24, 57, 113–14, 259,  
267, 322, 327  
quantitative changes, 24, 57, 89, 100, 110,  
113–14, 259, 267, 322, 327  
quantity into quality, transformation of,  
19–20, 69, 88  
quantum, 14, 159, 170, 216, 318, 337

computers, 238, 254, 256  
quantum mechanics, 139–40, 142, 145–46,  
149–50, 152–53, 155, 157–58, 168–71,  
200, 202, 246–47, 318–20, 324–25,  
327, 347–48  
and chaos theory, 247  
paradoxes of, 169  
Quantum Mind conference, 202  
quantum physics, 6, 10, 143, 145–47,  
155–56, 171, 191, 246–47, 338  
contemporary local, 171, 348  
developed, 140  
and parapsychology, 147  
quantum theory, 139–40, 142–43, 146, 149,  
153–54, 156, 158–62, 171, 247, 318,  
324  
modal interpretation, 318  
statistical, 146–47  
quarks, 139, 142, 258, 288

## R

racism, 66, 117, 272  
Raising Peanut Yields (dialectics), 49  
Ravitz Campaign (1974), 271, 344  
RCL (Revolutionary Communist League),  
278  
RCP (Revolutionary Communist Party),  
264, 266, 282–83, 285  
reactionaries, 37, 41, 284  
reality, 12, 14, 19, 22, 38–39, 60, 121, 141,  
143–44, 152–54, 156, 160–63, 165–67,  
188–89, 191–92, 228, 233, 246,  
248–50, 302–4  
of consciousness, 99  
external, 314–15  
local, 228, 235  
physical, 150, 152, 178, 189, 242, 250  
potential, 190, 248  
of remote viewing, 10, 238  
of telepathy, 192  
and thought, 163  
virtual, 189, 248  
we create our own, 228, 233  
recognition, 21, 99, 101, 112, 128  
rectification, 27, 47, 280  
Red Army (China), 41–46, 328

Red Banner, 268, 270, 348  
Red Hunting in the Promised Land (Kovel),  
265, 341  
reductionism, 57–58, 103, 108, 112, 116,  
118, 152, 223, 244  
reflection, 7, 107, 117, 128–29, 143–44,  
147, 160, 246, 281, 314–15  
Reid, Senator Harry and UFOs, 304  
relations, 29, 31, 50, 69–71, 75, 78, 83–84,  
93, 96, 98, 116–18, 120–21, 124–26,  
130, 281  
anticommutation, 171  
causal, 181  
conceptual, 148  
mathematical, 109  
quantitative, 104  
real, 62, 269  
relationship, 14, 18, 22, 114, 118, 153, 158,  
161, 163–65, 174–75, 181, 275, 279  
enfoldment, 159  
mathematical, 326  
of matter and consciousness, 164  
of mind and matter, 158  
of quantum mechanics to Marxist  
dialectics, 140  
real, 158  
relations of production, 74, 83, 134, 269  
relativity, 23, 136, 140, 143, 149, 161, 166,  
314, 323  
Einstein, 116, 143, 314  
general, 186  
special, 318  
theories, 143, 161–62, 216, 314, 323  
religion, 34–35, 83, 120, 123–24, 207, 220,  
222, 342  
remote viewers, 84, 180, 183, 194–95,  
197–98, 200, 203–6, 208–9, 222–23,  
228, 230, 254, 256, 303–4, 308  
First Generation, 309  
Second Generation, 309  
successful, 210  
remote viewing, 6–7, 10–11, 84, 193–95,  
200–201, 203, 205, 228–29, 251–52,  
254, 256, 302–3, 305–6, 310–12,  
331–33  
applications, 205

bulletin boards, 194  
businesses, 252  
community, 8, 178, 223, 225, 243, 305, 308  
companies, known successful, 252  
consciousness, 11  
Controlled Remote Viewing, 205  
courses, 205  
experiments, 207  
father of, 198, 218, 222, 311  
magazine, 197  
natural, 251  
operations, 209  
pioneer Joe McMoneagle, 311  
practitioners (survey), 205  
programs, 208, 210, 251, 253, 306, 308  
project, 177, 205, 253, 334  
and psi, 243  
reddit, 204  
research, 204, 313  
results, 254  
sessions, 84, 177, 199, 234, 305  
success, 196  
target, 200, 228, 310  
and telepathy, 305  
theories of, 200  
training, 251  
and UAP, 304  
and UFOs, 253, 302, 337  
Unidentified Phenomena, 303, 341  
unit, 200  
Whitley Strieber's Implant, 310  
remote viewing effort, active (US), 251  
remoteviewing.link, 204, 310, 348  
Remote Viewing Podcast (Daz Smith), 225  
remote viewing program and UFO research, 253  
Renaissance, 26, 141, 144, 313  
Rendlesham Forest, 311  
Report on Dialectics Section (National Joint Study), 287  
reports, 39, 42–43, 199–200, 210, 212, 252–53, 274, 303, 305–8, 311, 314–15  
abductees, 305  
experiencers, 303, 305  
personal, 253  
of telepathy, 303  
of UFOs, 307  
research, 113–14, 202–4, 207, 210–12, 215, 218, 220–21, 244, 247, 251, 253, 311, 313, 316–17, 346  
controversial, 220  
subsidized, 314  
researchers, 184, 188, 196, 200–201, 208, 216–17, 224, 248  
important brain, 218  
long-time UFO, 253, 302  
parapsychological, 316  
research institutes, 168, 314  
resistance, 41–42, 73, 146, 246, 304  
extreme, 85  
permanent, 100  
Resonant Viewing (Simeon Hein), 310  
retrocausal signals, 202–3  
revisionism, 28, 266, 268, 270, 278, 282–83, 285, 288, 315  
combatting, 282  
revolution, 33, 36, 38, 41–42, 44–49, 52, 76–78, 94–95, 98, 134–35, 239–41, 250–51, 264, 277, 288–89  
bourgeois, 105  
bourgeois-democratic, 47  
conceptual, 56  
democratic, 38  
first successful Marxist, 22  
major socialist, 240  
permanent, 42  
proletarian, 134, 272  
successful, 10, 41, 65, 83  
revolutionaries, 3, 7, 14–16, 37, 83, 238–40, 262, 264, 267, 271, 280  
aspiring, 266  
professional, 264  
Revolutionary Communist League (RCL), 278  
Revolutionary Communist Party. *See* RCP  
revolutionary movements, 61, 238–39  
revolutionary parties, 7, 40, 239, 264–65, 287  
revolutionary struggle, 33, 277, 341  
practical, 48



revolutionary theory, 33, 35, 37, 81, 277, 341  
indigenous Latin American, 37  
Revolutionary Union (RU), 282  
Revolutionary Workers League (RWL), 283  
Rhine Research Center, 230  
Rhine's experiments, 327  
Rice University, 197, 252–53  
Rightist errors, 238, 282, 284, 286–87, 340  
Rightists, 27, 48, 285–86  
Right Opportunism, 43–44, 48, 284–85, 289, 345  
roots, 38, 67, 84, 120, 132, 164, 171  
chemical, 51  
Roper polls, extraplanetary civilizations, 306  
RU (Revolutionary Union), 282, 284–85, 288  
rules, 54, 80, 104, 125, 150, 178, 184–85, 244, 247, 266, 271  
bourgeois, 283  
common, 51  
following, 185, 326  
simple, 327  
ruling class, 41, 65–66, 80, 124–25, 241, 251, 265  
decadent feudal, 133  
ideas, 124–25  
old, 24  
Russell-Whitehead theory, 102  
Russia, 6–7, 77–78, 207–9, 211, 218, 240–41, 251–52, 264–66, 303, 306–8, 341, 346  
capitalist, 242  
culture, 221, 348  
Imperialist, 134  
parapsychology, 218  
physicists, 152  
psychics, 208  
remote viewing program, 208, 210, 252  
revisionists, 266  
revolution, 8, 119, 302, 329, 350  
and surrounding countries, 220  
trips to, 208, 306  
Tsarism, 241–42  
Russian, Generals in remote viewing program, 210

Russian and Chinese revolutions, 237, 240  
Russians, 22, 151, 155, 196–97, 208–10, 237, 240–41, 251, 303, 306, 308  
Russia-Ukraine war, cause, 240  
RWC (Revolutionary Workers Congress), 283

## S

Sartre's dialectical reasoning, 65–68  
Saturn, 200–201  
Savin, General Alexei (Russian remote viewing), 220  
Schrödinger  
cat, 139  
wave function, 169, 171  
science, 58–60, 62–63, 77–78, 88–96, 101–4, 111–12, 114–18, 142–43, 150–54, 156–57, 167–68, 188–90, 214–16, 219–20, 222–24, 248–50, 324–25, 333–35, 338–39, 349–51  
atomic, 145  
biological, 98, 117  
bourgeois, 104  
empirical, 58, 179  
and parapsychology, 223  
physical, 99, 117, 146, 196, 223  
political, 68, 81  
progressive, 90  
social, 21, 116, 130, 168, 293  
Science and Spirituality in Late Socialist Bulgaria (Ivanova), 220, 339  
scientific knowledge, 69, 76, 114–16, 118, 144, 281  
scientific method, 58, 93–94, 111, 114, 116, 150–51  
Scientific Remote Viewing (SRV), 205  
scientists, 93–95, 103, 111, 114–15, 117–18, 149, 152, 189–91, 208, 211, 214–15, 239, 246, 250, 313–14  
communist, 115  
natural, 216–17  
SDS (Students for a Democratic Society), 270  
secrets, 71, 125, 142, 194, 256, 292, 308  
sectarianism, 265, 284–85, 289  
self, 22, 129, 191, 292

self- and mutual-admiration societies, 292  
 self-criticism, 112, 289  
 Senate Internal Security Subcommittee, 328  
 sensations, 91, 120, 128–29, 148, 181,  
     245–46, 313, 324  
     bodily, 173, 181, 183  
     combinations of, 128  
 sense organs, 165, 246, 313, 315  
     inadequate, 144  
 separation, 31, 91, 106, 125, 132, 164–65,  
     322  
 sequences, 76, 107, 123, 132, 166–67  
 sessions, 199, 205, 253, 305, 311  
     operational, 199  
 set  
     complex, 105  
     internal, 259  
     natural, 104  
     small, 98, 105  
     spacetime-indexed, 172  
 setbacks, 41–42, 135, 285  
 Severodvinsk Building (submarine remote  
     viewed), 197  
 shamanism, 207, 306  
 Sheldrake fields, 187  
 Shining Path (Peruvian Maoist party), 37  
 ship locations (interdiction using remote  
     viewing), 197  
 Sian Incident (China), 43  
 Siberian shamans, 213  
 singularity, 86, 149, 185, 255  
 situation, 34, 36, 39, 41, 46, 52, 57, 141,  
     237, 240–43, 274–77, 280, 283–84  
     actual, 106, 276  
     economic, 40, 95  
     fuzzy logic, 61  
     given, 36, 270, 288  
     particular, 115, 224  
     political, 38, 95  
     revolutionary, 37, 42  
 skeptics, 189, 203  
     combatting, 203  
 Skinwalker Ranch, UFO/UAP, 310  
 skulls, 188–89, 213, 248  
 sky, 188, 226, 242, 248, 304, 307  
 slogans, 25, 285–86  
 SLP (Socialist Labor Party), 267  
 smell, 84, 183, 185, 234, 326  
 socialism, 8, 24, 28, 37–40, 55, 88, 90,  
     240–41, 264, 266, 270, 277–79, 329  
     building, 8, 26, 36  
     and communism, 329  
     revolutionary, 79  
 socialist, 75, 241, 328, 330  
 socialist,bloc, 264  
 socialist  
     camp, 7–8  
     countries, 26, 79, 94, 168, 239, 264  
     independent, 329  
     kibbutz, 330  
     party, 30, 37, 267  
     revolution, 36, 38, 47, 59  
     society, 25, 28, 241  
     state, 241, 283  
     world system, 217  
 Socialist Labor Party, 267  
 Socialist Organizing Network (SON), 280  
 Socialist Workers Party (SWP), 18, 351  
 Social Security Administration (New Deal),  
     113  
 society, 21, 23, 25, 37–38, 59–61, 91, 93,  
     105–6, 110, 112–14, 116, 133–34, 171,  
     230, 250–51  
     bourgeois, 105  
     capitalist, 40, 133, 170  
     civil, 124  
     open, 58  
     primitive, 133  
 sociobiology, 103, 117  
 sociology, 112, 129, 334  
 SOL Foundation (scientists), 253  
 something it is like to be (in philosophy)],  
     174  
 soul, 11, 90–91, 120, 128, 174, 227, 315  
     distinct, 120  
 sounds, 114, 165, 183, 245, 254–55, 324,  
     326  
 Soviet  
     genetics, 116  
     government and UFO reporting, 306  
     jet, 208  
     literature, 218

parapsychology, 207, 213–15, 314  
 period, 169, 210, 242  
 philosophers, 79, 287  
 physicists, 155  
 psychotronic weapons, 212  
 research, 197, 213, 215, 218–19  
 science, 118, 210, 343  
 space exploration, 213  
 state, 211  
 Supreme Court in Moscow, 215  
 tank production, 197  
 use of hypnosis, 211  
 Soviet Marxism and natural science, 169, 339  
 Soviets, 93, 207, 214, 218–19, 221, 306, 348  
 Soviet Union, 24, 26, 33, 44, 64–65, 88, 90, 207, 210–11, 214, 216, 221, 265–66, 287, 313–15  
   and China, 239  
   Czechoslovakia, 196  
   former, 224  
   socialist, 134  
 space, 25, 122, 130, 147, 149, 153, 164–66, 177, 180, 183, 186, 226, 258  
   complex Minkowski, 201  
   complex Wigner, 172  
   empty, 140, 144  
 space-time, 177, 183, 201–3, 258, 323  
   and atomic physics, 146  
 species, 31, 56, 102, 106–8, 110, 112, 133, 255, 300, 302  
   human, 31, 145, 256  
   new, 56  
 speculation, 97, 123, 141, 319, 326  
   idle, 141  
 speeches, 25, 34, 163, 255, 343  
 spheres, 15, 35, 90, 92–93, 95, 147, 168  
   cultural, 134  
   fixed, 148  
   macroscopic, 147  
   political, 43  
 spirit guides, 235  
 spirits, 92, 99, 120–21, 124, 126–28, 130, 215, 230–32, 234–35  
   animal, 235  
   energies, 231  
   human, 149  
   troublesome, 232  
 spirituality, 220, 232, 339  
 spirit world, Engels criticism, 90  
 sports, 230, 331, 340–41  
 SRI (Stanford Research Institute), 191, 194, 196–97, 199–200, 204, 251–54, 313  
 SRI  
   experiments, 196, 199  
   program, 251  
 SRV (Scientific RV), 200, 205, 251, 311  
 stability, 110, 154, 165–66  
   dynamical, 110  
 stages of competence, Unconscious, 281  
 Stalinism, 80, 155  
 Standard Model (physics), 139  
 Star Gate  
   documents, 198  
   project, 177, 196–200, 203, 316, 334, 346  
   research, 253  
 Star Gate Archives (4 volumes), 198–200, 344  
 stars, 96, 137, 149, 208, 216, 233, 302, 325  
 state, 31, 34, 46, 96–97, 107, 109, 111, 119, 123–24, 131, 166, 173–74, 182–83, 325, 327  
   conscious, 173, 178, 180, 182  
   mental, 173  
   microphysical, 179  
   natural, 109  
   new, 166–67  
   phenomenal, 178–79  
   present, 72, 96, 253, 283  
   protophenomenal, 179  
 state capitalism, 93, 288  
 statement, 15, 28, 37, 91, 98, 267, 271, 274, 315, 318, 326  
   on dialectics, 267  
   logical, 15  
   mathematical, 319  
   systematic, 65  
 state socialism, 92–93  
 Stealth bomber, 197  
 Steven Schiff, and UFOs, 304  
 stories, 172, 181, 198, 226, 255, 302, 323  
   primal, 184

staple media, 39  
 strata, 123, 167–68, 300  
 Strategic Defensive (China), 45  
 strategy, 7, 35, 37, 43–45, 48, 67, 102, 271, 343  
   political, 38  
   and tactics, 35, 271  
   two-stage development, 55  
 stress, 10, 27, 36, 61, 68, 132, 153, 232, 242, 296  
 structure, 70, 86, 90–91, 105, 113, 116, 120, 142, 162, 166, 177, 183–84, 238–39  
   atomic, 154  
   dimensional protein, 117  
   enfolded, 165  
   ideal state, 38  
   metalinguistic, 86  
   molecular, 242  
   physical, 105  
   rational, 72  
   subject-verb-object, 163  
 struggle, 21–23, 26, 33–37, 40, 48, 50, 217, 267, 270, 275, 277–78, 286–87, 289  
   biological, 91  
   cosmic, 226  
   eternal, 226  
   national, 288  
   of opposites, 23, 40, 53, 136, 242  
   two-line, 287  
   wage, 279  
 study group, 7–8, 264, 273–76, 282–83  
 subjective factors, 148, 268, 286, 289  
 subjectivism, 42, 77, 285  
 submarine, 197, 212, 219  
 substances, 19, 89–90, 92, 100, 126, 128, 156, 160, 169, 247, 249  
   chemical, 182  
   extended, 164  
   immutable, 99  
   mysterious, 90  
   non-physical, 174  
   special mystical, 90  
   toxic, 131  
 subtlety, 79, 161, 190, 248, 320  
   bio-energy forms, 224  
   subtler layers to reality, 242  
 success, 9, 40–42, 47, 53, 110, 195–98, 208, 216–17, 252, 268, 279  
   commercial, 252  
   practical, 279  
   quantitative, 347  
 Suggestology and parapsychology, 220, 339  
 sun, 24, 108, 120, 130, 135, 227–28, 233, 257, 326  
 superconductivity, 160  
 superpowers, 218, 313–15, 350  
 Superpowers of the Human Biomind (Swann), 350  
 superstition, 26, 191, 216–17  
   ancient, 95  
   religious, 219, 313  
 superstrings, 189, 258  
   ten-dimensional, 258  
 superstructures, 74–76, 83  
   varied, 126  
 Supreme Being, 227, 232  
 Surfing the Psychic Internet (Daz Smith), 226, 228, 349  
 survey, 167, 205, 216, 239, 251, 306  
   belief in ESP/psi, 306  
   of Present-Day RV Practitioners, 205  
   of Remote Viewers, 204  
 Swedish UFO collection, 351  
 symbols, 19, 128, 184  
 Symington, Fyfe (Phoenix Lights), 304  
 symmetries, 258, 321, 323, 327  
 synthesis, 60–62, 96, 115, 146, 150, 152–53, 259, 267–68, 270  
   modern evolutionary, 56  
   rational, 154  
 systems, 20, 57, 66, 98, 100, 104–12, 116–17, 126–28, 157, 159, 170, 181–82, 184–85, 262–63, 322  
   anti-ballistic missile, 197  
   capitalist, 278  
   capitalistic, 38  
   complex, 110, 117, 254  
   epistemological, 149  
   feudal, 41  
   individual microphysical, 177  
   large military, 209  
   planetary, 144

predator-prey, 108  
pre-established belief, 189  
quantum, 158  
single, 91, 147  
social, 113, 279  
socioeconomic, 113, 259  
solar, 247, 302, 306  
star, 302  
visual, 184–85

## T

tactics, 7, 35, 38, 42–45, 271, 283, 288–89, 343  
Target Reference Number (TRN), 200  
TASS, report of UFO, 307  
taste, 84, 130, 183, 308  
teams, 49, 195, 198, 209, 216  
Technical Remote Viewing (TRV), 252  
Technical RV (TRV), 200, 251–52, 311  
technology, 156, 188, 224, 228, 232, 254, 256, 259  
    advanced, 250, 256  
    exploiting, 259  
    revolutionary information, 201  
telekinesis, 212  
telepathic overlay, 303, 305  
telepathy, 187, 191–92, 195–96, 207, 210–11, 213, 218–19, 221, 231, 303, 305, 314  
    clairsentience, 231  
    clairvoyance, 213  
    communication, 305  
    at a distance, 218  
    experience, 218  
    transmissions, 213  
temperature, 50, 53, 134, 151, 257–58  
terms, 60–63, 74–75, 84–85, 103–5, 119–20, 129, 158–59, 164–65, 174–75, 177–78, 187–89, 191–92, 207, 247–48, 263, 271, 295–96, 298–99  
    binary, 246  
    dialectics and materialism, 8  
    fundamental, 147  
    general, 113, 126  
    identity and unity, 21  
    mechanical, 162

    opposed, 70  
    physical, 248  
    revolutionary, 271  
    scientific, 195  
territory, 46, 86, 217, 243  
theoretical physicists, 117, 156, 255, 257, 280  
theoreticians, 268–69, 292, 295, 348  
theory, 22–23, 75–76, 82–84, 98–99, 115–16, 124, 132–35, 139, 145–46, 148–49, 153–54, 157–58, 161–63, 191, 243–44, 273–74, 276–77, 285–89, 291–93, 295–96  
    atomic, 140–41, 143, 168  
    chaos, 247  
    chemical, 91  
    chiral, 172  
    connectionist, 158  
    correct, 273, 285  
    digital, 184  
    economic, 129  
    field, 149  
    meson, 168  
    metapopulation, 118  
    modular, 172  
    multiverse, 189  
    perturbative renormalization, 171  
    physical, 156, 242, 303  
    political, 64, 80–81  
    and practice of dialectics, 23  
    scientific, 60, 76, 114, 157, 200  
    three-stage, 169  
theory of knowledge, 63, 129, 131–32, 280, 314  
Theses, 14, 22, 78, 175, 314, 325, 344  
thinking, 14, 22, 24, 56–57, 65–67, 103, 119–21, 123, 126–27, 133, 148, 160–61, 164, 174–75, 246  
    adaptationist, 58  
    allegorical, 141  
    and being, 22, 121, 126–27  
    evolutionary, 56  
    human, 14, 22, 175, 250  
    out-of-the-box, 238  
    in practice, 14, 22, 175  
    pre-scientific, 147

scientific, 111, 140, 143  
 third forces, 270, 286  
 Third International Congress on  
   psychotronics, 212  
 Third World countries, 237, 262  
 this-sidedness (Marx), 14, 22, 78, 175  
 thought, 19–20, 22–23, 69–72, 95–96,  
   121–23, 125, 127–28, 130, 148,  
   156–57, 160–64, 166–68, 182–83,  
   199–200, 231–33, 248–49, 269–70,  
   275–76, 305–7, 328–29  
   conscious, 160, 233  
   epistemological, 315  
   great, 222, 247  
   human, 20, 133, 143, 169, 276  
   logical, 165  
   scientific, 69, 92, 143  
   subjective, 23, 136  
 thought experiments, 181–82  
   philosophical zombie, 173  
 thought process, 163, 280  
 threat, 67, 73, 207, 210, 215, 237, 242,  
   313–14, 336, 345  
 Tibet, 47, 207, 213  
 time, 24–25, 40–43, 45–47, 49–51, 73–75,  
   80–82, 89–91, 93–95, 120–22, 124–26,  
   142–44, 156–57, 165, 198–201,  
   215–18, 222–31, 277, 287–88, 319–21,  
   325–30  
   classical, 96  
   geologic, 108  
   long, 28, 47–48, 55, 133, 166, 295  
   phenomenological, 183  
   psychological, 166  
 Time-symmetric theories, 318  
 totality, 122, 124, 148, 152, 162, 164,  
   166–67, 281  
   totalitising, 63  
   unknown, 164, 249  
 To The Stars Academy (TTSA), 304  
 tradition, 10, 35, 80, 109, 214  
   intellectual, 118  
 train, 160, 200, 203  
 training, 80, 204–5, 210, 251, 281, 311  
   classical psychic, 226  
   early classical, 229  
   intensive, 225  
   mental, 209–10  
   required combat, 209  
   specialized, 254  
 Transactional interpretation, 318  
 TransDimensional RV (TDRV), 200, 251,  
   311  
 TransDimensional Systems (TDS), 194–95,  
   200, 205, 251–52, 304, 311  
 transformation, 23–24, 60, 67, 100–101,  
   108, 119, 124, 143, 223, 350  
   complex, 135  
   of mass, 119  
   socialist, 28  
 transition, 47, 89, 91, 113, 115, 151, 170,  
   215, 242, 267, 334  
   phase, 257  
   real, 89  
 Transition Debate in Maoist China, 30  
 Travis Air Force Base, 8, 328  
 tree, 111, 132, 245, 324  
 trials, 239, 272, 316  
 trivialities, 151, 295, 322  
 TRN (Target Reference Number), 200  
 Trotskyism, 47, 79, 270, 283  
   and errors, 284  
 trust, 90, 118, 188, 295  
 truth, 14–15, 59–60, 71, 77, 102, 107, 132,  
   161, 167, 175, 181–82, 299, 303–4  
   absolute, 132, 161, 170  
   degree of, 14  
   final, 167, 173  
   innumerable relative, 132  
   objective, 14, 22, 175  
   relative, 132  
   universal, 26  
 TTSA (To the Stars Academy), 304  
 TV anchors, 303  
 TV reporter, George Knapp, 208, 306

**U**

UAP (Unidentified Aerial Phenomena), 252,  
   304, 307–8, 312  
 UFO  
   alleged bases, 305  
   contactees, 305

disclosure, 310, 312, 336  
 documents, 341  
 experiences, 97, 303–4, 308  
 literature, 303  
 phenomenon, 253, 256, 308  
 and remote viewing programs, 306  
 researchers, 199, 309  
 sightings, 256, 306, 308, 311  
 technology, 255  
 whistleblowers, 252, 310  
 UFO expert, Jacques Vallée, 306  
 UFO-RV connections, 302, 305  
 UFOs, 10, 194, 225, 252–55, 302–8,  
     310–11, 333, 338, 351  
     classic, 305  
     disturbing facets, 303, 307  
     giant, 303  
     reality of, 255, 302–4, 308  
     remote viewing of, 303  
     reports from Russia, 307  
     tracked, 304  
 Ukraine, 240, 242, 256, 308, 316–17, 346  
 Underground Railroad, 328  
 understanding, 59–61, 64, 67–68, 85–86, 88,  
     101, 146, 148, 248–50, 293, 296, 308,  
     326  
     better, 76, 178  
     coherent, 158  
     of dialectics, 29, 59–60, 89  
     nineteenth-century, 109  
     profounder, 143  
     real, 23, 136, 282  
     revolutionary, 38  
     scientific, 222, 326  
     theoretical, 284  
     traditional, 53  
 Unidentified Aerial Phenomena (UAP), 252,  
     304  
 Unidentified Submersible Objects (USO),  
     306  
 United Nations, 222–23, 350  
 United States, 7–8, 34, 117–19, 207, 209,  
     237, 240, 242, 264–66, 306–8, 313,  
     315–16  
 unity, 21, 40, 53, 74, 99, 126–27, 133, 161,  
     222, 242, 286–89  
     genuine, 286  
     historical, 132  
     national, 35  
 unity of opposites, 21, 23, 26, 31, 52–53,  
     99–101, 133, 136, 275, 288–90  
 unity of theory and practice, 99  
 unity of thinking and being, 127  
 universe, 69, 81, 83, 94–96, 132–33,  
     139–40, 163, 165, 175–76, 187–91,  
     226–28, 231, 302, 325–26, 347  
     completely mechanistic, 325  
     earth-centred, 116  
     expanding, 96  
     parallel, 189  
     participatory, 247  
     physical, 149, 223  
 US Air Force, taskings of SRI, 199  
 US Army, 330  
 US bases, UFOs interfering with training,  
     255  
 US government, 177, 199, 251, 255, 303,  
     308, 334  
 US government agencies, denial of UFOs,  
     303  
 US intelligence agencies, use of remote  
     viewing, 198, 210  
 US Marxist-Leninists, 270, 334  
 US Navy pilots, report of Tic-Tac UFO, 304  
 USOs, 306, 310  
 US ports, drug interdiction using remote  
     viewing, 197  
 USSR, 90, 197, 214, 239, 284, 306  
 USS Stark, Iraqi Exocet attack on, 197  
 utopia, 68, 88, 220, 279, 302, 336, 339, 350  
 utopian socialists, 88, 279

**V**  
 Van Vogt, World of Null-A, 254  
 variables, 50, 104, 107–9, 116, 254  
     dependent, 105  
     hidden, 154  
 vegetables (dialectics), 50–51  
 velocities, 139, 320–23  
 Vertical Biomagnet Field of Generator, 212  
 victory, 45–47, 52, 134–35  
 Victory Garden, 328

videos, 9, 194, 208, 225, 230, 304, 310–11, 327, 332, 337–38, 340  
Vienna Circle, interest in psychical research, 192  
Vietnam, 8, 33–34, 78, 266, 317, 346  
Vietnam War, 103, 171, 330  
viewers, 84, 196, 199–200, 205, 209–10, 225, 228, 251–52, 304–5, 311, 319  
  best, 199  
  civilian, 252  
viewpoint, 28, 60, 92, 112, 146, 149, 219, 250–51  
  consciousness is the fundamental, 178  
  contrasting, 149  
  economist, 61  
  identical, 53  
  proletarian class, 77–78  
  refuting idealistic, 154  
vision, 184–85, 213, 350  
  dermo-optic, 208  
visualization, 233  
vitalism, 171, 187–88, 250  
voices, 199, 250, 305, 327, 347  
Voronezh, Russian UFO case, 307

## W

warfare, 41, 44, 48, 114, 336  
  atomic, 143  
  blockhouse, 46  
War of Resistance (China), 41  
wars, 24, 41, 44–47, 94, 209, 228, 238, 240, 252, 316, 328  
  anti-colonial, 33  
  national, 41  
  protracted, 46  
  proxy, 240  
  revolutionary, 41, 43–44  
water, 29, 33, 51, 100, 131–32, 180, 219, 257, 288, 326, 329  
Watsonville struggle, and LRS, 279  
waves, 100, 150–51, 157, 162, 170, 216, 219, 226–27, 247, 280, 324  
  contradictory, 152, 154  
  electric, 219  
  electromagnetic, 219  
  gravitational, 186

  ocean, 322  
  pilot, 157, 249  
Wayaopao meeting, 42  
way of thinking, 67, 103, 105, 133, 158, 166, 168, 174  
wealth, 28, 54, 209  
  obscene, 256  
  personal, 55  
weather balloons, 303, 308  
Weather Keepers (dialectics), 49  
web site, 225, 230, 332, 336, 338–42, 348–50  
Weltanschauung (world view), 140, 221, 351  
Western Marxism, 118, 343  
Western parapsychologists, 212–13  
White Brotherhood (Bulgaria), 220, 339  
Whitehead  
  approach, 250  
  cosmology, 186  
  ideas, 187  
  perspective, 187  
  philosophy of psi, 186  
wholeness, 107, 159–63, 333  
wholes, 53, 57, 62, 104–7, 112  
  heterogeneous, 112  
Wikipedia, 3, 29–30, 56, 58, 63, 73, 88, 93, 97, 125, 129, 178–79, 203–4  
  entry on remote viewing, 204  
  exposing bias of, 204  
witnesses, 38, 87, 303, 305, 307–8, 314  
women, 24, 52, 110, 194, 209, 211, 216, 262–63, 273, 275–76, 283  
  third world, 293  
wood, 99, 119, 184, 351  
work, 43, 51–52, 56–57, 63–65, 67–68, 82, 88, 90, 102, 114–15, 117–18, 156–58, 162, 169–71, 198–99, 214, 217–18, 271–72, 293–94, 296–97  
  anti-terror, 195  
  client, 205, 251  
  experimental, 212  
  fact-checking, 103  
  factory, 115  
  operational, 196, 199  
  professional, 117



psychotronic, 211  
revolutionary, 266  
scientific, 98, 117, 280, 302  
theoretical, 111, 179, 244  
workers, 38, 42, 48, 50, 52, 105, 241, 251,  
272, 276, 280  
Worker's Action Movement, 272  
Workers Congress (WC), 283  
Workers' Unity, 314  
Workers Viewpoint Organization (WVO),  
280, 282  
working class, 28, 38, 66, 72, 78, 265, 270,  
277, 282, 286  
exploited, 35  
industrial, 264  
militancy, growing, 65–66  
small, 239  
world, 21–22, 24, 64–68, 96–98, 104–5,  
107–9, 120–21, 124–26, 128–30,  
134–35, 142–45, 158–59, 173–77,  
187–91, 254–56, 278–79, 291–94,  
296–98, 313–15, 324–27  
alienated, 105–8, 112  
atomic, 142–43  
biological, 104, 109  
empirical, 60, 152  
everyday, 247  
hidden, 83  
macroscopic, 145  
microscopic, 247  
natural, 69, 119, 167, 182, 235, 250  
objective, 21, 132, 140, 145, 273, 315  
public, 222  
real, 100, 102, 121–22, 127, 279, 322  
world of consciousness, 189–90, 350  
world outlooks, 132–33  
metaphysical, 23, 133, 136  
vulgar evolutionist, 133  
World War II, 224, 256, 296, 328  
writers, 3, 31, 63, 195, 313

## **X**

X-ray crystallography, and Bernal, 93

## **Y**

Yankee Radical's Journey (Clive Knowles),  
331, 340  
youth, 57, 280, 329  
YouTube videos, 225, 349  
Yugoslavia, 317, 346

## **Z**

Žižek Studies, 86–87, 335, 341

[Created with **TExtract** / [www.TExtract.com](http://www.TExtract.com)]

## NAME INDEX

### A

Adamenko, 212  
Adorno, Theodor, 5, 85–86, 332  
Alexander, John, 253  
Allgire, Dick, 310, 337  
Althusser, Louis, 5, 56, 73–79, 276, 332  
Andersen, Kevin, 31, 332  
Andropov, Yuri, 207, 214–15  
Angus, Ian, 5  
Aristotle, 5, 14–15, 18–19, 21, 98, 333  
Arnold, Leslie, 329  
Atunrase, Tunde, 333  
Atwater, Skip, 311  
Auerbach, Loyd, 6, 220, 344  
Australia, 316, 345  
Avakian, Bob, 265  
Avenarius, 129

### B

Baba Vanga, 316  
Balano, Jim, 328  
Baraka, Amiri, 287  
Barchenko, Alexander, 207, 221  
Bard, 3, 64–68, 174–75  
Barr, Stephen, 246  
Becker, Marc, 5, 37, 333  
Bekhtereva, Natalia P., 218  
Berghoff, Garrett, 318  
Bergson, Henri, 12  
Berkeley, George, 126, 129, 156, 179, 194, 330  
Bernal, JD, 5, 88, 93, 96–97, 115, 117–18, 152, 155, 245, 251, 333  
Blake, William, 326  
Blumenthal, Ralph, 304  
Blunden, Andy, 5  
Bogdanov, Alexander A., 152  
Bohm, David, 154, 156–58, 161, 167, 174–76, 179, 181, 186, 242–43, 246, 249–51, 333  
Bohr, Niels, 5, 27, 139–40, 143, 146, 151, 153–55, 333, 336  
Bolsheviks, 40, 59, 129, 207, 241  
Born, Max, 5, 30, 140, 149–51, 155–56, 170–71, 218, 324, 333, 337

Bourget, David, 173  
Brenner, Sydney, 188  
Brezhnev, Leonid, 207, 214  
Brown, Courtney, 194, 304, 312  
Buchanan, Lyn, 311  
Bukharin, Nikolai, 5, 29, 120, 129, 243, 245–46, 289–90, 334, 341

### C

Cabral, Amilcar, 5, 33–34, 245, 342  
Calabrese, Prudence, 194, 252  
Campbell, Ben, 5, 118, 334  
Carnap, Rudolf, 192  
Carneiro, Robert L., 5, 113, 334  
Castro, Fidel, 265  
Chaco Canyon, 304  
Chakrabarty, Dipesh, 65  
Chalmers, David, 6, 173–79, 185–86, 243–44, 334–35  
Champion, Alexis, 252  
Chan-Wyles, Adrian, 89, 334  
Chao Ching-chuan, 52  
Charles, Richard, 342  
ChatGPT-4, 185, 254  
Chengtu, 23, 343  
Chen Shao-yu, 48  
Chen Tu-hsiu, 43, 47  
Chiang Kai-shek, 42, 44, 46  
Chi Hung, 313  
China Books, 264  
Chin Pang-hsien, 48  
Chomsky, Noam, 6, 9, 63, 85, 192, 238, 240, 291, 297, 334  
Chou Ku-Ch'eng, 53, 351  
Christian, Forstner, 157, 235, 319, 337  
Clapp, Robin, 5, 31, 335  
Clark, Andy, 6, 119, 185–86, 335  
Clark, Tom, 119  
Clarke, Arthur C., 96  
Clarke, Richard, 5, 114  
Coombs, Nathan, 5, 87, 335  
Cooper, Helene, 304  
Cramer, John, 318  
Crick, Francis, 188  
Crookes, William, 217

**D**

Dames, Ed, 252, 304, 311  
Darwin, Charles, 56–57, 91, 117, 145, 217  
Davenport, Marc, 305  
Davidson, Carl, 284  
Davidson  
    Donald, 191  
    Rurik, 5, 81  
Davies, Paul, 246–47  
Davitashvili, Dzhuna, 214  
de Broglie, Louis, 154, 156  
DeGenova, N, 5, 31, 336  
Deng Hsiao-Ping, 30, 87, 241–42, 335  
Deng Xiaoping, 39–40  
Dennett, Daniel, 191  
Derrida, Jacques, 31, 293–94  
Descartes, René, 98, 100, 130, 158, 164  
Dewey, John, 186  
Dick, William, 306  
Dietzgen, J., 127  
Dirac, Paul, 318–19  
Dong Shen, 336  
Dossey, Larry, 191  
Dunov, Peter, 6, 220, 339  
Duplessis, Yvonne, 211  
Dyson, Freeman, 250

**E**

Ebon, Martin, 6, 207, 210, 215, 218,  
    313–14, 336, 345  
Eccles, John, 6, 190–91  
Einstein, Albert, 4–5, 7, 117, 119, 139–41,  
    143, 145–46, 149, 186, 192, 195, 333,  
    336  
Elbaum, Max, 8, 336  
Eldredge, Niles, 56, 118  
Elizondo, Lue, 255, 304, 336  
Engels, Friedrich, 5, 18–22, 61, 68–69,  
    74–76, 78–82, 88–92, 95, 98–100, 109,  
    114–15, 119–20, 122, 128, 145,  
    150–51, 167–68, 287–89, 300–301,  
    336–38  
Epicurus, 168  
Everett, Hugh, 318

**F**

Fang Yu-his, 52  
Feuerbach, Ludwig, 14, 22, 74, 77–78, 86,  
    98, 120, 124, 127–28, 337, 344  
Feynman, Richard, 146, 169–70, 176, 240,  
    242–43, 245–46, 251, 318–19, 321,  
    323, 325, 327, 337  
Fock, Vladimir, 152, 154  
Fodor, Jerry, 191  
Ford, Angela, 6, 208  
Forstner, Christian, 157, 319, 337  
Foucault, Michel, 293–96  
Fourier, Charles, 88  
Fraser, Simon, 318  
Freire, Olival, 5  
Friedman, Eli, 5, 55

**G**

Gallagher, Shaun, 6, 186, 337  
Gang Li, 336  
Geller, Uri, 216, 311, 327  
Gemini, 9, 28, 59, 64, 174, 254, 281  
Gieser, Suzanne, 5, 171, 338  
Glatzer, Bernice, 221, 348  
Gliniecki, Ben, 5, 171, 338  
God, 120–21, 144, 149, 188–89, 227–28,  
    231–35, 298, 302, 314, 320, 327–28  
Gödel, Kurt, 192  
Good, John, 305  
Gorky, Maxim, 15–16, 78–79, 313  
Goswami, Amit, 318  
Gould, Stephen Jay, 56, 103  
Graham, Loren, 57  
Gramsci, Antonio, 39, 76  
Grant, Ted, 5, 119, 169, 351  
Greer, Steven, 309  
Gribbin, John, 246–47  
Griffin, David Ray, 6, 186–87, 338  
Groisman, Berry, 5, 61–62, 338  
Grusch, David, 253, 310  
Guevara, Che, 37, 258  
Guiné, 34–35  
Gulyaev, Pavel, 213

**H**

Haldane, JBS, 5, 88, 97–100, 102, 117–18,  
243–44, 251, 338  
Harcourt, Bernard, 5, 65, 72, 338  
Hartshorne, Charles, 186  
Haya, Victor Raul, 38  
Hegel, Georg, 18–21, 29, 31, 60, 69, 71,  
76–78, 80, 82–83, 86, 98–100, 121–22,  
258, 332  
Hein, Simeon, 310, 338  
Heisenberg, Werner, 139, 143–44, 153, 155,  
169, 191, 324  
Hepler, Allison, 331  
Heraclitus, 15, 21, 101  
Hessen, Boris, 114  
Higdon, Carl, 311  
Hill, Scott, 6, 220, 339  
Hodgkin, Dorothy, 117  
Hoffman, Donald, 145, 243  
Honorton, Charles, 191  
Hoxha, Enver, 265, 287, 289  
Hsin Ping, 313  
Hsi Yu, 135  
Hsu Hung-Chang, 313  
Huai Nan Tzu, 135  
Hughes, General Patrick M., 198  
Hui, Elaine, 5, 47, 55, 339  
Hume, David, 128, 293, 295  
Husick, Gail, 252  
Hynek, J. Allen, 308

## I

Iakov Frenkel, 155  
Ilyenkov, Evald, 79  
iRiS Intuition, 251  
Ivanova, Veneta, 220, 339

## J

Jackson, Thomas Alfred, 29–30, 245, 339  
Jacobsen, Anja Skaar, 5, 151, 156, 339  
James, William, 186  
Jameson, Fredric, 5, 31, 339  
Jeans, James, 149, 247  
John, David, 334  
Johnson, Samuel, 85  
Jones, Scott, 306  
Joravsky, David, 5, 169, 339

Jordan, Pascual, 5, 140, 142, 144–45, 154,  
171, 339, 348  
Josephson, Paul R., 156

## K

Kaku, Michio, 255, 257, 280, 340  
Kamensky, Yuri, 6, 208  
Kant, Immanuel, 18, 77–78, 86, 128, 148,  
183  
Karpov, Anatoly, 211  
Kastrup, Bernardo, 243  
Katz, Debra Lynne, 6, 201, 205–6, 222–23,  
225, 230, 340–41  
Kautsky, Karl, 5, 29, 245, 340  
Kazhinsky, Bernard, 6, 218–19  
Kennedy, John F., 330  
Khokhlov, Nikolai, 6, 220, 340  
Khrennikov, 171, 338  
Khrushchev, Nikita, 207  
Klimova, Elena, 209  
Knight, Nick, 5, 340  
Knowles, 10–11, 340–41  
Knowles, Clive, 331  
Knowles, Jon, 303, 308  
Knowles, Mary Ruth Gardner, 338  
Koi, Isaac, 311  
Korabel-nikov, Yuri, 208, 214  
Korchnoi, Victor, 211  
Kovel, Joel, 265, 341  
Kripal, Jeff, 253  
Krippner, Stanley, 211  
Krivorotov, Alexey, 214  
Kua Fu, 135  
Kuhn, Thomas, 109, 116–17  
Kulagina, Nina, 6, 208, 212, 340  
Kuo-tao, Chang, 44  
Kurzweil, Ray, 185, 255  
Kuttner, Fred, 318

## L

Lacan, Jacques, 86, 293–94  
Lakoff, George, 85  
Lakshmi, 235  
Lama, Dalai, 207  
Last, Cadell, 5, 86  
Latvia, 317, 346

Laurikainen, KV, 5, 169, 341  
Lehar, Steven, 188, 248  
Lehner, Christoph, 150, 337  
Lenin, 5–8, 21–22, 29, 40, 44–45, 59–62,  
74, 76–80, 98–101, 119–20, 128–29,  
132–33, 145, 151–52, 155, 245–46,  
287–89, 302, 332, 341  
interview, 302  
and Mao, 7, 19, 40, 61  
and Philosophy, 76, 78, 332  
principles, 288  
Vladimir, 5, 207  
Lenin's  
approach, 145  
blessing, 207  
book, 151–52  
dialectics, 26  
formulation, 145  
letters, 79  
materialism, 152  
name, 277  
observations, 22  
thought, 151  
words, 99  
Leverrier, Urbain, 21, 92  
Levins, Richard, 5, 102–3, 113, 118–19,  
177, 240, 243, 250–51, 342, 351  
Levins and Lewontin, 29, 57–58, 103, 176,  
179, 245–46  
Lewontin, Richard, 5, 29, 57–58, 102–3,  
118, 176, 179, 240, 245–46, 342  
Lewontin and Levins, 113, 177, 243, 250–51  
Liao Chai, 135  
Lichtenstein, Rosa, 56, 79, 81–85, 297, 342  
Li Li-san, 43, 47–48  
Liu Shao-chi, 30, 289  
Lodge, David, 294  
Lumi, 59–61  
Luxemburg, Rosa, 80  
Lysenko, Trofim, 58

## M

Mach, Ernst, 129, 152  
Machel, Samora, 5, 33, 35–36, 245, 342  
Magdo, Zsuzsanna, 220, 342  
Magubane, Bernard, 5, 34, 342

Maher, George, 32, 342  
Majumdar, Ramesh Chandra, 5, 30, 245  
Mamardachvili, Merab, 76, 332  
Mao's  
debt, 287  
discussion, 275  
Model, 281  
principles, 239  
supposed rejection of negation of  
negation, 31  
Understanding, 288  
Mao Tse-tung, 33, 47, 74, 270  
Mao Yüan-hsin, 27, 343  
Mao Zedong, 5, 7, 28–31, 39, 49, 52, 61,  
131–32, 239–43, 245–46, 265–66, 276,  
281, 287–90, 343  
on China becoming cocky, 25  
essays, 23  
examples of unity of opposites, 26  
on law of excluded middle, 19  
On Contradiction, 40  
On correcting mistaken ideas in the party,  
41  
On Tactics against Japanese Imperialism,  
42  
on particularity and universality of  
contradiction, 50  
peasants apply Mao's ideas, 51  
Problems of Strategy in China's  
Revolutionary War, 43  
talk at Chengtu, 23  
Marchetti, Victor, 6, 215  
Mariátegui, José Carlos, 5, 33, 37–39, 245  
Mars, 305, 310–12  
Marwaha, Sonali Bhatt, 6, 198–200, 202,  
325, 344  
Marx, Karl, 5, 18–20, 22, 29, 31, 59–61,  
74–93, 98–100, 122, 135, 258–59,  
267–69, 279, 291, 343–44  
books on, 9  
to Engels about Darwin, 114  
and Engels on nature, 89  
on Epicurus and matter, 168  
great basic thought about the world, 121  
his originality, 71  
on negation, 101

Theses on Feuerbach, 14  
Marx and Engels, 76, 80–81, 88, 115,  
119–20, 122, 145, 150, 168, 171,  
267–68, 330, 332  
Marxism, learned, 22  
Mattick, Paul, 5, 170, 344  
May, Edwin C., 6, 14, 30, 191, 198–200,  
202–3, 208–10, 220, 252–53, 325, 344  
May and Marwaha, 199, 202  
Mayr, Ernst, 5, 56–57, 117, 245, 251, 344  
McMoneagle, Joseph, 6, 194, 208–9, 220,  
252, 304–5, 311, 344  
Mellon, Chris, 304  
Mendeleyev, Dmitri, 20, 90–93, 215  
Menger, Karl, 63, 344  
Mermin, David, 146  
Mishlove, Jeffrey, 230  
Moore, George, 5  
Morehouse, David, 304  
Morgan, Lloyd, 101  
Mutze, Ulrich, 319, 345

## N

Newlin, Clay, 280, 289, 345  
Newton, Isaac, 33, 69, 114, 116, 139, 201,  
247  
Nicolaus, Martin, 284  
Nie Chongrung, 313–14, 345  
Nielsen, Harry, 5, 169–70, 345  
Nikolayev, Karl, 6, 208  
Nolan, Garry, 253

## O

Oppenheimer, Robert, 156  
Owen, Robert, 88

## P

Pannekoek, Anton, 151–52, 155  
Pauli, Wolfgang, 151, 155, 169, 171, 192,  
341  
Pavlita, Robert, 211  
Pavlitova, Jana, 211  
Peierls, Rudolf, 247  
Peirce, Charles Sanders, 186  
Penkovsky, Oleg, 215  
Perry, Nelson, 265–68

Petersen, Eric, 80, 82, 346  
Petersen, John, 198  
Phetland, 293–96  
Philbrick, Herbert, 329  
Phillips, William D, 140, 347  
Planck, Max, 142, 243, 247  
Plato, 86, 100–101, 163  
Plekhanov, Georgi, 21, 80, 98, 120, 125–26,  
128, 243, 245–46, 347  
Podesta, John, 304  
Popper, Karl, 5, 56, 58–63, 116, 190, 338,  
347  
misrepresents Hegel, 60  
notion of science, 116  
understanding of dialectics, 59  
Pratt, Joseph, 5–6, 86, 208, 347  
Pribram, Karl, 165  
Price, Pat, 194, 253, 311  
Proudhon, Pierre-Joseph, 269–70  
Puthoff, Harold, 6, 196, 199–200, 253, 313,  
347

## Q

Quan Yin, 235  
Quine, Willard Van Orman, 191, 330

## R

Radin, Dean, 222  
Rauscher, Elisabeth, 6, 201, 347  
Ravitz, Justin, 271–72  
Rejdak, Zdenek, 211  
Renshaw, Ken, 201  
Rescher, Nicholas, 186  
Riley, Mel, 312  
Riordan, Edward, 310  
Robeson, Paul, 328  
Roerich, Nicholas, 207  
Roosevelt, Franklin Delano, 328  
Rorty, Richard, 31  
Rose, Hilary, 115  
Rose, Steven, 115, 118  
Rosenblatt, Marty, 6, 201–2, 222, 348  
Rosenblum, Bruce, 318  
Rosenfeld, Léon, 5, 140, 149, 151–56, 243,  
245, 251, 348  
Rosenthal, Bernice, 6, 221, 348

Rubel, Victor, 6, 208, 220, 344  
Run-Sheng Shen, 336  
Russell, Bertrand, 6, 173, 235, 242  
Rutherford, Ernest, 154  
Ryzl, Milan, 316, 345

**S**  
Safonov, Vladimir, 214  
Sakata Shoichi, 5, 27, 140, 167, 245, 251  
Sanders, Bernie, 39  
Sanmugathan, Nagalingam, 5, 30, 245  
Sartre, Jean-Paul, 5, 56, 63–68, 70–73, 338,  
348  
Savin, General Alexei, 209  
Schaefer, Georg, 6, 221, 348  
Schatzman, Evry Léon, 154  
Schnabel, Jim, 198  
Schneider, Rudi, 216  
Schorlemmer, Carl, 5, 88–89, 332  
Schrödinger, Erwin, 155, 201, 248, 324  
Schroer, Bert, 5, 171, 348  
Schwartz, Stephan, 202, 311  
Scientia Sinica, 313  
Scientific RV (SRV), 200, 205, 251, 311  
Seager, William, 5, 157, 348  
Searle, John, 6, 10, 173, 175, 179–85,  
243–44, 348–49  
Shao Tieh-Chen, 55, 349  
Sheehan, Helena, 5, 118, 334, 349  
Sheldrake, Rupert, 6, 173, 187–89, 243, 248,  
250, 349  
Silber, Irwin, 272, 349  
Sinclair, Upton, 195  
Sison, Jose Maria, 5, 29, 245, 349  
Smith, Daz, 6, 204, 223–26, 303, 310  
Smith, John, 99  
Smith, Paul H., 203–5, 312, 350  
Socrates, 98, 101–2  
Sommer, Andreas, 192, 350  
Spain, 38, 317, 346  
Spencer, Herbert, 117  
Spickermann, Wolfgang, 6, 215  
Spirkin, Alexander, 6, 189–90, 214, 248,  
350  
Stalin  
death, 207

era, 241  
errors, 290  
metaphysics, 26  
Joseph, 25, 44, 72, 74, 81, 135, 151, 287,  
290, 328, 330  
Stapp, Henry, 186, 246, 318  
Stevenson, Ian, 182  
Stonehill, Paul, 306  
Swann, Ingo, 6, 181, 184, 187, 194, 196,  
198–201, 218, 220, 222–24, 252, 311,  
350

**T**  
Tafarella, Santi, 6, 190–91, 351  
Taketani, Mitsuo, 5, 168–69, 245, 251, 350  
Tamm, Igor E., 152  
Targ, Russell, 191, 194, 199, 201, 204, 253,  
311, 347  
Terauchi, Kenju, 305  
Tishchenko-Korabelnikova, Ludmilla, 208,  
214  
Tomita Takesaki, 172  
Tressoldi, Patrizio, 205  
Trotsky, Leon, 5, 10, 18–19, 79, 81, 88, 90,  
243, 245, 284, 290, 351  
Tsunyi, 43–44, 46, 48  
Tung Shan-yun, 51

**U**  
Ulyanov, Vladimir Ilyich, 21, 341

**V**  
Valentich, Fred, 310  
Valentine, Leslie, 318  
Vallée, Jacques, 6, 198–99, 253, 256, 302,  
305, 307, 351  
Vasiliev, L.L., 207, 213, 215, 218–19, 221  
Vendryes, Nyiam, 310, 337  
Vigier, Jean-Pierre, 154  
Vilenskaya, Larissa, 6, 208, 211, 214  
Vinogradava, Alia, 212  
Vygotsky, Lev, 31, 333

**W**  
Wallace, Alfred Russel, 217  
Wallis, Victor, 5

Wang Hsui, 52  
Wang Ming, 48  
Warcollier prize, 225  
Watson, Donald, 6, 190  
Watts, Fraser, 6, 187, 250, 351  
Weiss, Paul, 186  
Wells, H.G., 302  
Wheeler, John, 318  
Whitehead, Alfred North, 6, 173, 186–87,  
243, 250  
Wigner, Eugene, 171–72, 246, 318  
Wilde, Lawrence, 5, 32, 351  
Williams, Lori, 205  
Wilson, Bernard, 6, 190  
Winner, Harry, 329  
Wittgenstein, Ludwig, 80, 180, 192  
Woods, Alan, 5, 169

## **Y**

Yao Shih-Chang, 49  
Yao Wen-Yuan, 5, 53, 351  
Yen-ch'ang, 25  
Yingnan Zhao, 5  
Yutaka Tanaka, 186

## **Z**

Zhivkova, Lyudmila, 221, 351  
Žižek, Slavoj, 87, 335  
Znamenski, Andrei, 6, 207, 221, 352