

Philosophical Foundations of Social Research
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Week 5 (Karl Marx) : Lecture –12
Dialectic

Hello, everyone. Welcome to the 12th lecture of this Massive Open Online Course on Philosophical Foundations of Social Research.

Course outline

Week 5 (Three Lectures)

Karl Marx

- Idealism versus materialism
- Materialist conception of history
- Principles of dialectic
- Understanding nature
- Ideology and science: methodological implications

Week 6 (Four Lectures)

Karl Popper

- Principle of falsification
- Context of discovery and justification
- Hypothetico-deductive model

Thomas Kuhn

- Consensus-driven paradigm
- Normal science
- Anomalies
- Crisis
- Revolutionary science
- A new paradigm

If you look at this, we are in the fifth week of this course and this is the second lecture of the fifth week, we are going to have. In the last lecture, we have discussed idealism versus materialism, and Marx's account of materialist conception of history popularly known as historical materialism. And today, we are going to discuss principles of dialectic.

Historical Materialism

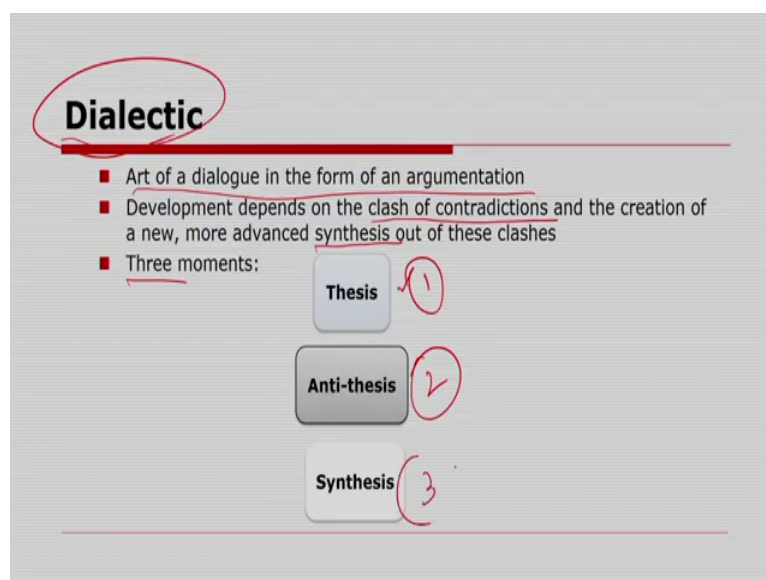
- **Historical:** how particular forms of society have come into existence, and the specific historical contexts within which apparently universal or eternal social forms are located
- **Materialism:** rejection of Hegelian idealism and the primacy of socioeconomic processes and relations

What we have done till now, if you look at this, we have already discussed what each historical in historical materialism. I mean, how the term historical entails how particular forms of society have come into existence, and the specific historical contexts within which apparently universal or eternal social forms are located.

And how materialism denotes rejection of a Hegelian idealism and the primacy of socio economic processes and relations. We have classified historical materialism in three parts; one, general theory of historical materialism, particular theories of historical materialism and regional theories of historical materialism, we have discussed them.

And today what we are going to do, we are going to discuss dialectic or the principles of dialectic. Marx never used the term dialectical materialism. This term dialectical materialism was coined by the 19th century social theorist Joseph Dietzgen. And of course, later on, in the erstwhile Soviet Union, Joseph Vissarionovich Stalin tried to use dialectical materialism and historical materialism interchangeably, which is actually not correct to use them interchangeably.

Having discussed historical materialism, let us come to the principles of dialectic. What are the principles of dialectic? What is dialectic prima facie? At the first site let me tell you, before getting into Marxist dialectic, please remember that in the fifth century BC, even Socrates was in favour of such dialectic.

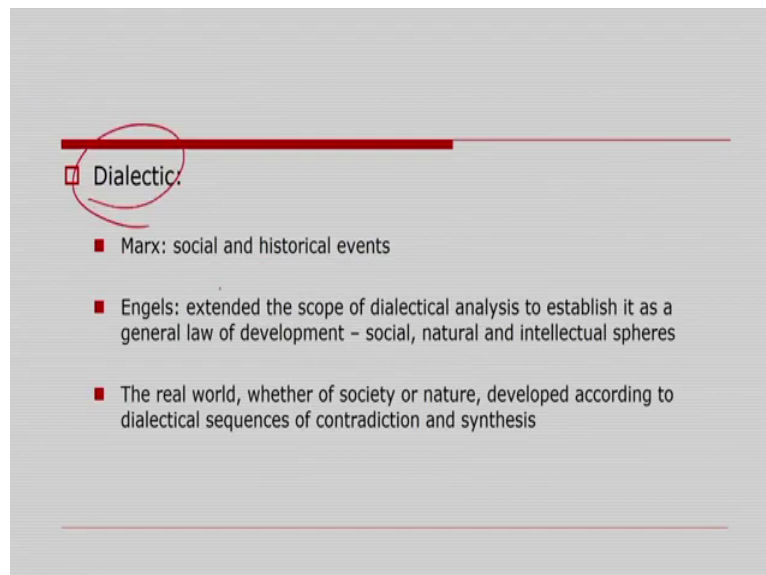


Dialectic refers to the art of dialogue in the form of an argumentation. Whatever I say you should not accept it as it is, you should not accept any dictum. You should always accept it after putting some reason in the statements that I have made. Even Socrates stated that.

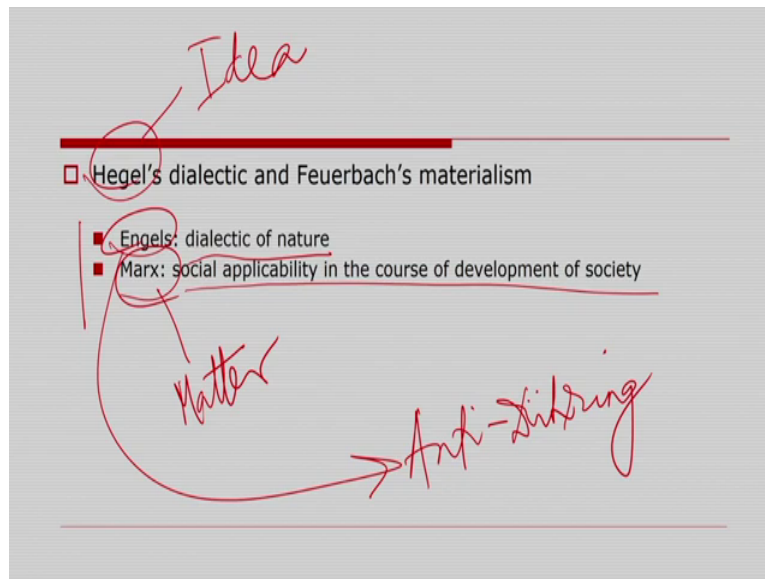
Now, this term dialectic expresses the view that development depends on the class of contradictions and the creation of a new more advanced synthesis out of such classes. When I say class of contradictions, I mean contradiction between labour and capital, contradiction between private ownership and social ownership, communitarian ownership.

What Marx did with this class of contradictions and the creation of a new more advanced synthesis out of these classes? Initially Marx was a part of young Hegelian club, and Hegel and Feuerbach together tried to look at dialectic and materialism respectively.

And for Hegel, I mean, in terms of a Hegelian dialectic, there are three movements or three phases, three stages. One is thesis, secondly anti-thesis, and out of which what comes out is the synthesis, we will see how. That is why I said the dialectical process involves the three movements, thesis, antithesis, and synthesis.



Marx used the notion of dialectic to account for social and historical events. Whereas Engels extended the scope of dialectical analysis to establish it as a general law of development that applied equally in social, natural and intellectual spheres. They believe that the real world whether of society or of nature, developed according to dialectical sequences of contradictions and synthesis. And that dialectical logic was the means by which one could comprehend this development.



Now, drawing lessons from Hegel's dialectic and Feuerbach's materialism, both Marx and Engels have propounded the principles of dialectical in historical materialism. When Engels was deeply engrossed in studying the Dialectics of Nature, Marx found out their social applicability in the course of development of society.

Marxist dialectic is a form of Hegelian dialectic which applies to the study of historical materialism. Marxist dialectic, which includes Engels, purports to be a reflection of the real world created by human species. Dialectic could thus be a robust method under which one could examine personal, social and economic behaviours.

Marxist dialectic is the core foundation of the philosophy of dialectical materialism, which forms the basis of the ideas behind historical materialism, that we have already discussed, how particular forms of society have come into existence and so on. I mean, starting with hunting and gathering economies, the slave society, the feudal society, the capitalist society, which will inevitably and unstoppably move on to socialism and thereafter communism.

Marx and Engels, writing several decades after Hegel's death, proposed that Hegel's dialectic is too abstract. Let me quote what Marx had to say "The mystification which dialectic suffers in Hegel's hands, by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner. With him, it is standing on its head, it must be turned right side up again and if you discover the rational kernel with the mystical cell."

In contradiction to Hegelian idealism, Marx presented his own dialectic method, which he claims to be the direct opposite of Hegel's method. Marx's dialectic method is not only

different from the Hegelian, but it is its direct opposite. To Hegel, the life process of the human brain, that is the process of thinking, which under the name of the idea, she or he even transforms into an immediate subject and the real world is only the external phenomenal form of the idea.

With Marx, on the contrary, the ideal is nothing less than the material world, reflected by the human mind and translated into forms of thought. Both Marx and Engels, they advocated the primacy of socio economic processes and relations, in terms of matter being prior to the formation of idea.

In Marxism, the dialectical method of historical study became intertwined with historical materialism, the school of thought exemplified by the works of Marx, Engels and Lenin. In the erstwhile Soviet Union, under the leadership of Stalin, Marxist dialectic became sort of dialectical materialism, a theory emphasizing the primacy of the material way of life, social praxis over all forms of social consciousness and the secondary dependent character of the idea.

That is why I said the term dialectical materialism was coined by the 19th century social theorist Joseph Dietzgen, who used the theory to explain the nature of socialism and social development. The original popularizer of Marxism in Russia, Plekhanov, used the term dialectical materialism and historical materialism interchangeably which is actually not correct to do.

For Lenin, the terms dialectic, the primary feature of Marx's dialectical materialism was its application of materialist philosophy to history and social sciences. Lenin's main input in the philosophy of dialectical materialism was his theory of reflection, which presented human consciousness as a dynamic reflection of the objective material world that fully shapes its contents and structure.

Later, Stalin's works on the subject established a rigid and formalistic division of Marxist Leninist theory in the dialectical materialism and historical materialism parts. While the first was supposed to be the key method and the theory of the philosophy of nature, the second became the Soviet version of the philosophy of history.

We are not much interested in the Soviet version of the philosophy of history, rather we are interested in the first version. We want to understand the principles of dialectic and historical materialism, prima facie separately, then we will try to understand historical materialism and

the principles of dialectic in understanding nature, in understanding science, in understanding ideology, in understanding knowledge and so on.

Engels, proposed that nature is dialectical, and thus in *Anti-Duhring* he said that the negation of negation is a very simple process, which is taking place everywhere and everyday, which any child can understand as soon as it is stripped of the veil of mystery in which it was enveloped by the old idealist philosophy.

In *Dialectics of Nature*, Engel said, probably the same gentlemen who up to now have decried the transformation of quantity into quality as mysticism, and incomprehensible transcendentalism, will now declare that it is indeed something quite self evident, trivial and commonplace, which they have long employed and so they have been taught nothing new. But to have formulated for the first time in its universally valid form of general law of development of nature, society and thought will always remain an act of historic importance.

Marxist dialectic is exemplified in *Das Kapital* which outlines two central theories, one is surplus value and the materialist conception of history, we have already discussed in the last class. Marx explains dialectical materialism this way:

In its rational form it is a scandal and abomination to bourgeoisdom and its doctrinaire professors, because it includes in its comprehension and affirmative recognition of the existing state of things, at the same time also, the recognition of the negation of that state, of its inevitable breaking up; because it regards every historically developed social form as in fluid development, and therefore takes into account its transient nature not less than its momentary existence because it lets nothing impose upon it, and is in its essence critical and revolutionary.

And for this reason, class struggle, class conflict is the primary contradiction to be resolved by Marxist dialectic. Because of its central role in the social and political lives of a society, nonetheless Marx as well as Marxists developed the concept of class struggle to comprehend the dialectical contradictions between mental and manual labour,

Dialectic

Manual and mental labour

- Art of a dialogue in the form of an argumentation
- Development depends on the clash of contradictions and the creation of a new, more advanced synthesis out of these clashes
- Three moments:

Thesis (1)

Anti-thesis (2)

Synthesis (3)

between private ownership and social ownership, between manual and mental level there is such contradiction between the northern hemisphere and the southern hemisphere, I mean, between the developed countries and developing countries.

Hence, the philosophic contradiction is central to the development of dialectic, the progress from quantity to quality, the acceleration of gradual social change, the negation of the initial development of the status quo, and in the negation of that negation and the high level recurrence of features of the original status quo. We will see then, what are the principles of dialectic.

Principles of dialectic

- Quantitative changes lead to qualitative changes and vice-versa
- Unity and struggle (interpenetration) of opposites
- The principle of negation of negation

There are three principles of dialectic initially; one is, quantitative changes lead to qualitative changes and vice-versa; interpenetration of opposites, I mean, unity and struggle of opposites; and thirdly, the principle of negation of negation. We will see how it operates.

The first one, the first principle that is quantitative changes lead to qualitative changes and vice-versa, this one, Hegel took from ancient Greek philosophers, notably the paradox of the hippo and explanation by Aristotle. And it is equated with what scientists call phase transitions, it may be traced to the ancient philosophers, particularly Anaximenes, from whom Aristotle, Hegel and Engels inherited the concept.

For all these authors, one of the main illustrations is the phase transitions of water. There has also been an effort to apply this mechanism to social phenomena, whereby population increases result in changes in social structure. The law of the passage of quantitative changes into qualitative changes can also be applied to the process of social change and social conflict.

The second law, that is interpenetration of opposites, or unity and struggle of opposites, originates with the ancient philosopher Heraclitus was seen by both Hegel and Lenin later on as the central feature of a dialectical understanding of things. It is in this dialectic, as it is here understood, that is in the grasping of oppositions in their unity or of the positive in the negative, that speculative thought consists, it is the most important aspect of dialectic.

Principles of dialectic

- Quantitative changes lead to qualitative changes and vice-versa
- Unity and struggle (interpenetration) of opposites ✓
- The principle of negation of negation

Science of the general laws of motion - external world and of human thought

Hegel wrote in Science of Logic and Lenin in his Collected Works, Volume 38, on the question of dialectics, that the splitting of a single whole and the cognition of its contradictory parts is the essential characteristic features of dialectic. This is precisely how Hegel puts the matter.

When you come to the third principle, the principle of the negation of negation, in fact, it originated with Hegel. Although Hegel coined the term negation of the negation, it gained its

fame from Marx's using it in capital volume One. There, Marx wrote, "the death knell of capitalist private property sounds, the capitalists are expropriated. The capitalist mode of appropriation, the result of the capitalist mode of production produces capitalist private property." This is the first negation or anti-thesis of individual private property.

The first negation or anti-thesis negates the thesis, which in this instance is feudalism, the economic system that preceded capitalism. But capitalist production begets with the inexorability of law of nature, its own negation. The final communism is the negation of that negation. Engels as well Marx, they used these three principles of dialectic, namely quantitative changes lead to qualitative changes, then unity and struggle of opposites, I mean, interpenetration of opposites, the principle of negation of negation and so on throughout their works.

That is why I said, if you look at Marxist dialectic, that class struggle is the primary contradiction to be resolved by Marxist dialectic because of its central role in that social and political lives of a society. Nevertheless, Marx and his followers developed the concept of class struggle to comprehend the dialectical contradictions between mental and manual labour, labour and capital, town and country and so on.

As the most comprehensive and profound doctrine of development, and the richest in content, Hegelian dialectic was considered by Marx and Engels the greatest achievement of classical German philosophy. The great basic thought Engels writes, 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.

This great fundamental thought has, especially since the time of Hegel, so thoroughly permeated ordinary consciousness that in its generality it is now scarcely ever contradicted. But to acknowledge this fundamental thought in words and to apply it in reality in detail, each domain of investigation are two different things.

For dialectical philosophy, nothing is final, nothing is absolute, nothing is sacred, it reveals the transitory character of everything and in everything; nothing can endure before it except the uninterrupted process of becoming and passing away; of endless ascendancy from the lower to the higher. And dialectical philosophy itself is nothing more than the mere reflection

of this process in the thinking brain. Thus, according to Marx, dialectic is the science of the general laws of motion, both of the external world and of human thought.

Lenin describes his dialectical understanding of the concept of development; what is this kind of dialectical way of development in Marxist scholarship? For Lenin, for Vladimir Ilyich Ulyanov Lenin, a development that repeats as it were stages that have already been passed, but repeats them in a different way on a higher basis, the negation of the negation.

A development, so to speak that proceeds in spirals not in a straight line, a development by leaps, catastrophes and revolutions breaks in continuity and the transformation of quantity into quality, inner impulses towards development imparted by the contradiction and conflict of the various forces and tendencies acting on a given body or within a given phenomenon or within a given society.

The interdependence and the closest and indissoluble connection between all aspects of any phenomenon history constantly revealing ever new aspects, a connection that provides a uniform and universal process of motion, one that follows definite laws, these are some of the features of dialectic as a doctrine of development that is richer than the conventional one

An example of the influence of Marxist dialectic in the European tradition is Sartre's book critique of dialectical reason. Sartre stated, existentialism like Marxism addresses itself to experience in order to discover their concrete synthesis. It can conceive of these synthesis only within a moving dialectical totalization, which is nothing else but history or from the strictly cultural point of view adapted here, philosophy becoming the world.

Dialectical materialism is a philosophy of science and nature developed in Europe and based on the writings of Marx and Engels. As I have mentioned what the Marxist dialectic already emphasizes the importance of real world conditions in terms of class, labour, and socio economic interactions. This is in contrast to the Hegelian form of dialectic which emphasizes the observation, that contradictions in material phenomena could be resolved by analysing them and synthesizing a solution whilst retaining their essence.

Marx on the contrary supposed that resolutions to such material conditions laced with contradictions could be in new forms of social organisation. Dialectical materialism accepts the evolution of the natural world and the emergence of new qualities of being at new stages of evolution. The formulation of the Soviet version of dialectic and historical materialism in the 1930s by Stalin and his associates - Stalin's book, I mean Dialectical and Historical

Materialism became the official Soviet interpretation of Marxism, which obviously is a deviation from what Marx originally stated.

Marx and Engels never used words dialectical materialism in their own writings. The term dialectical materialism, as I said, was coined by Joseph Dietzgen in 1887, a socialist who corresponded with Marx during and after the failure of the German revolution in 1848. Casual mention of the term dialectical materialism is also found in the biography of Frederick Engels by philosopher Karl Kautsky. Written in the same year, Marx himself had talked about the materialist conception of history, which was later referred to as historical materialism by Engels.

Engels further explained the materialist dialectic in his *Dialectics of Nature*, in 1883. And Plekhanov first used the term dialectical materialism in 1891, in his writings on Hegel and Marx. Stalin further delineated and defined dialectical and historical materialism as the world outlook of Marxism and Leninism, and as a method to study society and its history.

Marx and Engels each began their adulthood as young Hegelians, as one of the several groups of intellectuals inspired by Hegel. Marx's doctoral thesis, *The Difference Between the Democritean and Epicurean Philosophy of Nature*, was concerned with the atomism of Epicurus, and Democritus, which is considered the foundation of materialist philosophy.

Marx was also familiar with Lucretius' theory of *clinamen*. Marx and Engels both concluded that Hegelian philosophy at least as interpreted by their former colleagues, was too abstract and was being misapplied in attempts to explain the social injustice in recently industrialized countries such as Germany. In the erstwhile industrial age they were recently introduced to the Industrial Revolution like Germany, France and the United Kingdom, which was alleged in the early 1840s to be a growing concern.

In contrast to the conventional Hegelian dialectic of the day, which emphasized the idealist observation that human experience is dependent on the mind's perceptions, Marx developed Marxist dialectic, which emphasized the materialist view that the world of concrete shapes, socio-economic interactions, and that those in turn determined socio-political reality.

Whereas some Hegelians blamed religious alienation, that is, estrangement from the traditional comforts of religion for societal ills, Marx and Engels concluded that alienation from economic and political autonomy, coupled with exploitation in poverty was the real culprit.

In keeping with dialectical ideas, Marx and Engels, thus created an alternative theory, not only of why the world is the way it is, but also of which actions people should take to make it the way it ought to be. There are at least four questions which one must raise in research - as Ramkrishna Mukherjee, one of the founders of Indian sociological tradition, once he said, that a researcher must address at least four questions.

One, what is it? Secondly, how is it? Thirdly, why is it? And fourthly, what will it be?

The first two questions, what is it and how is it, they are descriptive in nature. The question why is it, is explanatory in nature. And what will it be, is exploratory in nature. What Marx and Engels have done, they have tried to go beyond exploration, they are saying what ought to be. Then they are going beyond description, explanation and exploration, they were trying to look at the normative structure of what ought to be given the structure, given the nature of evolution, what should be our life, what should be the structure of the state, what should be the relation of the state with the citizens with the people and so on.

That is why Marx and Engels created an alternative theory, not only of why the world is the way it is, but also of which actions people should take to make it the way it ought to be. And if you have to look at normative questions, then you have to undertake certain action which will lead you to arrive at that normative place.

In thesis on Feuerbach of 1845, Marx wrote - the last thesis, thesis 11, this is on Feuerbach - that the philosophers have only interpreted the world in various ways, the point however is to change it. Dialectical materialism is thus closely related to Marx's and Engels' historical materialism and has sometimes been viewed as synonymous with it. Marx rejected the language of Hegel that thesis antithesis and synthesis.

Dialectical materialism is an aspect of the broader aspect of materialism which asserts the primacy of the material world in short matter precedes thought, matter is prior to the formation of idea. Materialism is a realist philosophy of science which holds that the world is material, that all phenomena in the universe consist of matter in motion, wherein all things are interdependent, and interconnected, and developed according to natural law.

That the world exists outside us and independently of our perception of it; that thought is a reflection of the material world in the brain and that the world is in principle, knowable. That people earlier used to think that something is not knowable, something is knowable. But if

you look at the principles of dialectic, principles of materialism, then you will find that, the world in principle is knowable.

Marx criticized classical materialism as another idealist philosophy- idealist because of its trans-historical understanding of material context. The young Hegelian Feuerbach had rejected Hegel's idealistic philosophy and advocated materialism. Despite being strongly influenced by Feuerbach, Marx rejected Feuerbach's version of materialism -anthropological materialism- as inconsistent. The writings of Engels, especially *Anti-Duhring* and *Dialectics of Nature* were the sources of main doctrines of dialectical materialism.

Then what we are going to do now, we are going to look at these three principles simultaneously. We have been doing that, we are going to do it in detail that the concept of dialectical materialism emerges from statements by Marx in the second edition preface to the magnum opus *Das Kapital*. There Marx says, he intends to use Hegelian dialectic, but in a revised form. He defends Hegel against those who view him as a dead dog, and then says, I openly award myself as the pupil of that mighty thinker, Hegel.

Marx credits Hegel with being the first to present dialectic form of working in a comprehensive and conscious manner. But he then criticizes Hegel for turning dialectic upside down, with him it is standing on its head, it must be turned up again - If you will discover the rational kernel within the mystical set.

We have discussed this that Marx's criticism of Hegel asserts that Hegel's dialectic goes astray by dealing with ideas with the human mind. Hegel's dialectic, Marx says, inappropriately concerns the process of the human brain, it focuses on ideas. Hegel's thought is in fact, sometimes called dialectical idealism. And Hegel himself has counted on a number of other philosophers known as German idealists.

On the contrary, Marx believed that dialectic should deal not with the mental world of ideas, but with the material world, the world of production and other economic activities. For Marx, human history cannot be located in a neat apriori schema -apriori means prior to empiricism, prior to experience- that is why for Marx, there is nothing called apriori, so far as human history is concerned. He explicitly rejects the idea of Hegel's followers that:

History can be understood as a, person apart, a metaphysical subject of which real human individuals are but the bearer. To interpret history as though previous social formations have somehow been aiming themselves toward the present state of affairs, is to misunderstand the

historical movement by which the successive generations transformed the results acquired by the generations that preceded them.

And Marx's rejection of this sort of teleology was one reason for his enthusiastic reception of Darwin's theory of natural selection. In fact, Marx wanted to dedicate the first volume of *Capital* to Darwin, which Darwin disagreed. For Marx, dialectic is not a formula for generating predetermined outcomes, but it is a method for the empirical study of social processes in terms of interrelations, development and transformation.

If you look at his works on capital, what Marx suggests, when the dialectical method is applied to the study of economic problems, economic phenomena are not viewed separately from each other by bits and pieces, but in their inner connection of an integrated totality structured around and by a basic pre-determinant, or a basic predominant mode of reduction.

And Marx's own writings are almost exclusively concerned with understanding human history in terms of systemic processes based on modes of production. Broadly speaking, the ways in which societies are organized to employ their technological powers to interact with their material surroundings. This is historical materialism, more narrowly within the framework of this general theory of history. Most of Marx's writings are devoted to an analysis of the specific structure and development of the capitalist economy.

For his part, Engels applies a dialectical approach to the natural world in general, arguing that contemporary science is increasingly recognizing the necessity of viewing natural processes in terms of interconnectedness. They are not isolated categories, in terms of interconnectedness, in terms of their development, in terms of their transformation, in terms of their change and so on.

Some scholars have doubted Engels *Dialectics of Nature* as a legitimate extension of Marx's approach to social processes. But of course, other scholars have argued that despite Marx's insistence that human beings are natural beings in an evolving mutual relationship with the rest of nature, Marx's own writings pay inadequate attention to the ways in which human agency is constrained by such factors as biology, geography and ecology.

Engels and Marx postulated these laws of or these principles of dialectic from their reading of Hegel's *Science of Logic*. This is how, in fact, in *Dialectics of Nature*, Engels elucidated these principles of the materialist dialectic.

After reading Hegel's Science of Logic in 1914, Lenin made some brief notes outlining three elements of logic, that is the determination of the concept out of itself, the contradictory nature of the thing itself and the union of analysis and synthesis. It is not much different from what Engels and Marx had said.

Lenin develops these in a further series of notes and appears to argue that the transition of quantity into quality and vice versa is an example of the unity and opposition of opposites expressed tentatively as not only the unity of opposites, but the transitions of every determination quality, feature, side, property into every other.

In his essay 'on the question of dialectic', Lenin stated, development is the struggle of opposites. He stated the unity, coincidence, identities, equal action of opposites is conditional, temporary, transitory, relative. The struggle of mutually exclusive opposites is absolute just as development and motion are absolute.

In materialism and empirio-criticism, Lenin explained dialectical materialism as three axis; one, the materialist inversion of Hegelian dialectic; secondly, the historicity of ethical principles ordered to class struggle; and thirdly, the convergence of laws of evolution in physics, I mean, Helmholtz biology, Darwin and in political economy Marx.

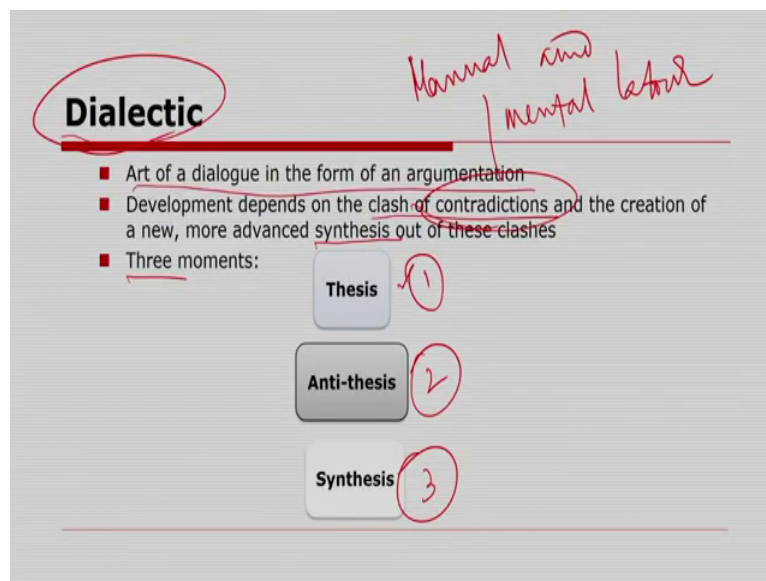
Hence, Lenin was philosophy clearly positioned between historicists Marxism and determinist Marxism, a political position close to Social Darwinism in the works of Karl Kautsky. Moreover, 19th century 20th century discoveries such as X rays, electrons and the beginning of quantum mechanics, philosophically challenged previous conceptions of matter and materialism, thus matter seemed to be disappearing.

And in this context, Lenin strongly disagreed. For Lenin, matter disappears means that the limit within which we have hitherto known matter disappears and that our knowledge is penetrating deeper properties of matter are disappearing that formerly seemed absolute, immutable and primary, and which are now revealed to be relative, and characteristic only of certain states of matter.

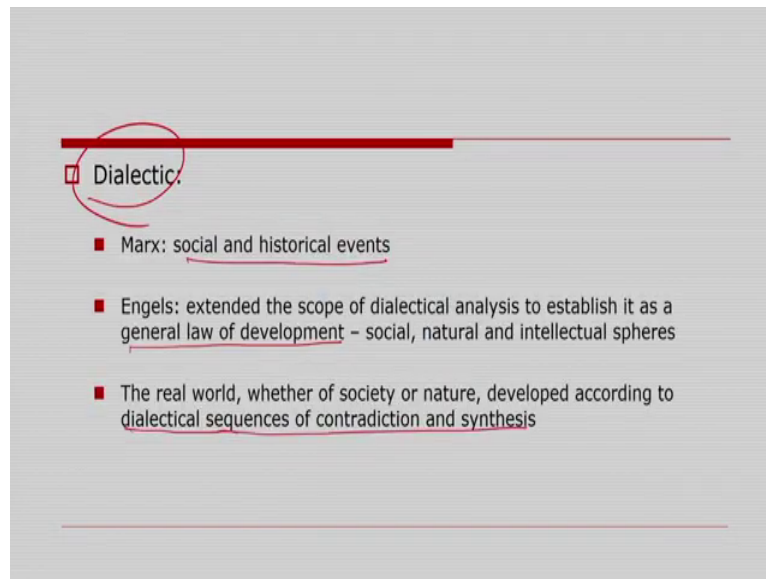
For the sole property of matter with whose recognition philosophical materialism is bound up is the property of being an objective reality of existing outside of the mind. Lenin was developing the work of Engels who said that with each epoch making discovery even in the sphere of natural science, materialism has to change its form.

One of Lenin's challenges was distancing materialism as a viable philosophical outlook from the vulgar materialism expressed in the statement that the brain secretes thought in the same way as the liver secretes bile, attributed to 18th century physician de la Mattrie.

The philosophic solution that Lenin and Engels proposed, that dialectical materialism wherein matter is defined as objective reality, theoretically consistent with new developments occurring in the sciences. Lenin reassessed Feuerbach's philosophy and concluded that it was in line with dialectical materialism, though Marx was vehemently opposed to Feuerbach's materialism in his thesis on Feuerbach.



Now, then in this lecture what we have discussed? In this lecture we have discussed how the term dialectic refers to the art of dialogue in the form of an argumentation, how the term dialectic expresses the view that development depends on the class of contradictions and the creation of a new more advanced synthesis out of such classes. The dialectical process involves three movements, this is the Hegelian dialectical process which Marx later on rejected, I mean three movements; thesis, antithesis and synthesis.



Marx used the notion of dialectic to account for social and historical events. And Engels extended the scope of dialectical analysis to establish it as a general law of development that applied equally in social, natural and intellectual spheres. Both Marx and Engels believed that the real world whether of society or nature developed according to dialectical sequences of contradiction and synthesis. And the dialectical logic was the means by which one could comprehend this development.

Drawing lessons from Hegel's dialectic and Feuerbach's materialism, both Marx and Engels have propounded the principles of dialectical and historical materialism. When Engels was deeply engrossed in the Dialectics of Nature, Marx found out their social applicability in the course of the development of society.

The principles of dialectic, in short are threefold, one, quantitative changes lead to qualitative changes and vice versa. Secondly, interpenetration of opposites, unity and struggle of opposites. And thirdly, the principle of negation of negation and how human history is a part of history of nature. And you will also see how human history is basically a movement of nature developing towards human species.

Marx always talked of unity of science. According to Marx, natural science will in time incorporate into itself, the science of man, just as the science of man will incorporate itself into science of nature. The social reality of nature and natural science of man are identical terms for Marx.

And having discussed this, in the next lecture we are going to discuss understanding nature, understanding the relationship between nature and human species, understanding how Marx

tried to look at theory of ideology, and how Marx tried to look at theory of science or knowledge.

Marx has to be evaluated not simply as an ideologue of the Communist Party, but also must be evaluated as a top notch theoretician. Thank you.