

**Aspects of Western Philosophy**  
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**Module - 28**  
**Lecture - 28**  
**Linguistic turn in British philosophy**  
**Russell's logical atomism**  
**Refutation of idealism**

Welcome to this lecture on Aspects of Western Philosophy module 28. So, this lecture onwards we are actually entering the contributions of 20th century philosophy and we start with the linguistic turn in British philosophy probably very relevant to start with because it is usually stated that 20th century western philosophy is philosophy of language and this is to a very great extent through for both the traditions the British Anglo Saxon tradition as well as the continental tradition of western thought even in the continental tradition we can see that people like Heidegger and Gadamer are very actively perceiving linguistic turn.

But in of course, in a different way in the British philosophy English speaking countries particularly British philosophy, it is very clear the emergence of analytical philosophy happens during this time and this is the very active period, very active in philosophizing with different streams of different approaches to philosophy and philosophy of language this age has witnessed and this lecture we will just see we will have a very brief introduction about the linguistic turn in British philosophy, the historical reasons or rather the we will just try to instead of looking at the historical reasons, we will just try to see how it is evolved primarily through the works of G E Moore and the Bertrand Russell these two very influential thinkers of 20th century philosophy and of course, with very significant contributions from Non-English speaking philosophers like Gottlob Frege again Wittgenstein is another very important influence.

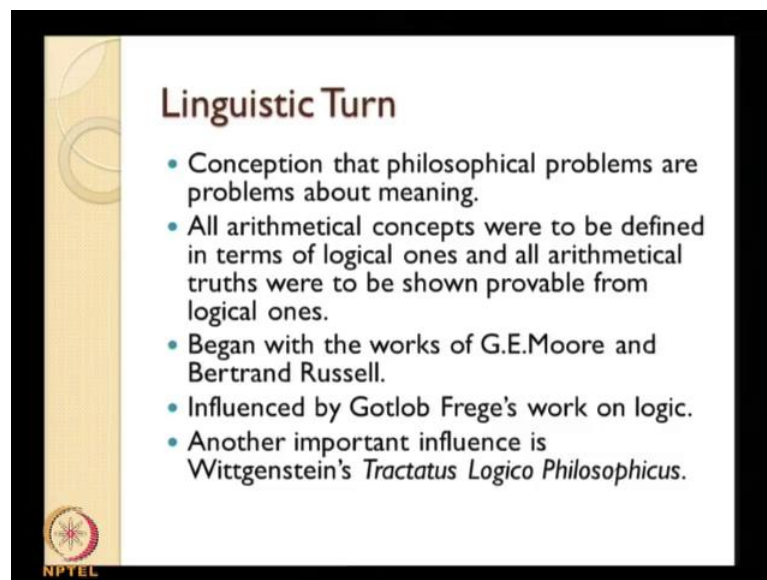
So, these are the kind of things which we are going to cover in this lecture. We will particularly concentrate on the philosophy of Bertrand Russell by seeing his refutation of idealism and how this refutation is initiated by adopting a philosophical method called analytical philosophy analysis of language and linguistic analysis is adopted as a method but this method is supplemented by philosophy; a metaphysics a kind of you know a

theory of reality by Bertrand Russell which is elaborated in his logical atomism. So, we will very briefly introduce Russell's logical atomism in this lecture.

Well, when we talk about linguistic turn in British philosophy there are certain things to be kept in mind. The modern period which we have already covered in the previous lectures, we have seen that somewhere around with the philosophies of Rene Descartes and Spinoza and many others in the continental rationalistic tradition and of course, the British empiricist tradition. All these philosophers were dealing with the problem of knowledge rather than addressing the concept of reality or knowledge about reality they were rather interested in to know about knowledge itself, what is knowledge.

So, that is why modern philosophy is predominately epistemological they were all adopting a kind of epistemological approach which again changes or under goes very important change during the initial years of twentieth century with the works of Bertrand Russell and G E Moore. So, that is why it they are often being treated as the founders of this analytic philosophy in British philosophy.

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The slide is titled "Linguistic Turn" and features a list of five bullet points. The text is presented in a clean, sans-serif font. On the left side of the slide, there is a vertical yellow bar with a circular graphic element. At the bottom left corner, the NPTEL logo is visible.

### Linguistic Turn

- Conception that philosophical problems are problems about meaning.
- All arithmetical concepts were to be defined in terms of logical ones and all arithmetical truths were to be shown provable from logical ones.
- Began with the works of G.E.Moore and Bertrand Russell.
- Influenced by Gotlob Frege's work on logic.
- Another important influence is Wittgenstein's *Tractatus Logico Philosophicus*.

So, when we talk about linguistic turn; linguistic turn deals with in the conception that philosophical problems are problems about meaning and when we talk about meaning we are dealing with linguistic entity meaning is something which is there in language. This is something which is already been worked upon by philosophers like Gottlob Frege, a German mathematician and logician and also a philosopher very important

contributions to the domain of logic and philosophy of mathematics. We can see that there is very active exchange between Frege and Bertrand Russell, then there is a time when we will Wittgenstein went to meet Frege and Frege ask we can stein to the go back and work with work with Bertrand Russell because Bertrand Russell was also sort of involved in a kind of work which Frege was part of.

So, there where Frege has already pointed out that certain conception like truth for example, which philosophers, traditional philosophers have always treated as one of the most important metaphysical concepts. Frege is already pointed out that truth can always be examined in connection with language. So, in that sense the concept of truth is to be understood as something as a property of number sentences, it is a sentence which is either true or false or a proposition which is either true or false.

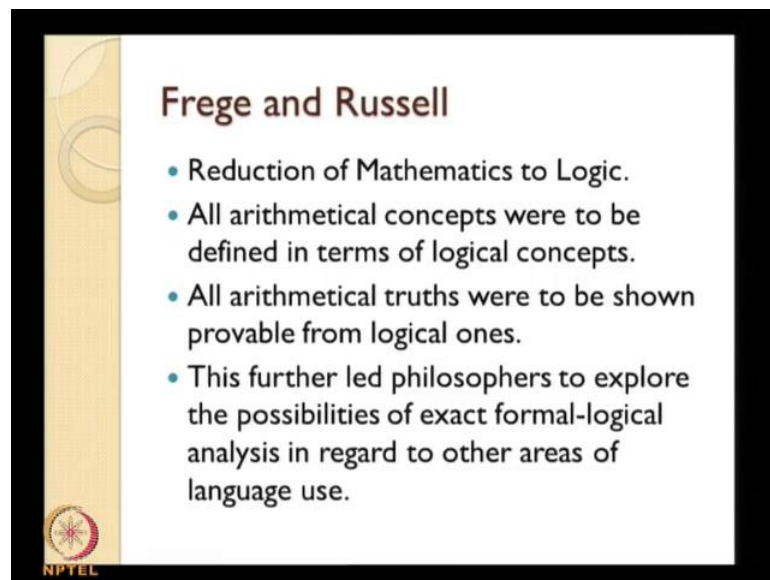
So, in that sense the linguistic turn has already been initiated and according to some thinkers like Michael (Refer Time: 05:37) and others Frege is the founder of analytical philosophy, but anyway that is something which is not to be discussed in the course of this lecture. So, we will just try to understand that you know the most important point about linguistic turn is; there is a clear conception of philosophy or philosophical problems as they are being treated as problems arising in language use or problems related to the meaning which are linguistic in nature.

So, in that sense again you know as since we over lot to Frege and Russell they are all mathematicians and logicians, there is a kind of analysis they have initiated in mathematics because both of them they are dealing with the problem of identifying the logical foundations of mathematics or to put it in other words we were trying to reduce all mathematical propositions to logical propositions. So, it is a very interesting project both of them where sort of under taking and in that due course what they have discovered is that all arithmetical concepts were to be defined in terms of logical ones and all arithmetical truths were to be shown provable from logical truths.

So, everything can be ultimately reduced to kind of logical truth and logical concepts. So, this can be termed as a kind of logicism in philosophy which was primarily advocated by Frege and then to a very great extent by Russell as well, but when we talk about linguistic term in philosophy, we can say that it began with the works of G E Moore and Bertrand Russell not with Frege.

Though in Frege's philosophy there is it involves a lot of language analysis, but the kind of turn like all philosophical problems even we can see that in the (Refer Time: 07:33) in the course of this lecture, we can see that Russell is even advancing a kind of linguistic analysis in order to show that or in order to refute idealism. So, everything is approached from a linguistic from or rather as a matter of philosophical analysis of language. So, in that sense a linguistic philosophy began with the works of G E Moore and Bertrand Russell and it was influenced by Gottlob Frege's work on logic. Another important influence was Wittgenstein's very important work Tractatus Logico Philosophicus, the only work which he published during his life time.

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The slide features a title 'Frege and Russell' in a dark red font. Below the title is a bulleted list of four points. The slide has a decorative left margin with a yellow background and a circular graphic. The NPTEL logo is visible in the bottom left corner.

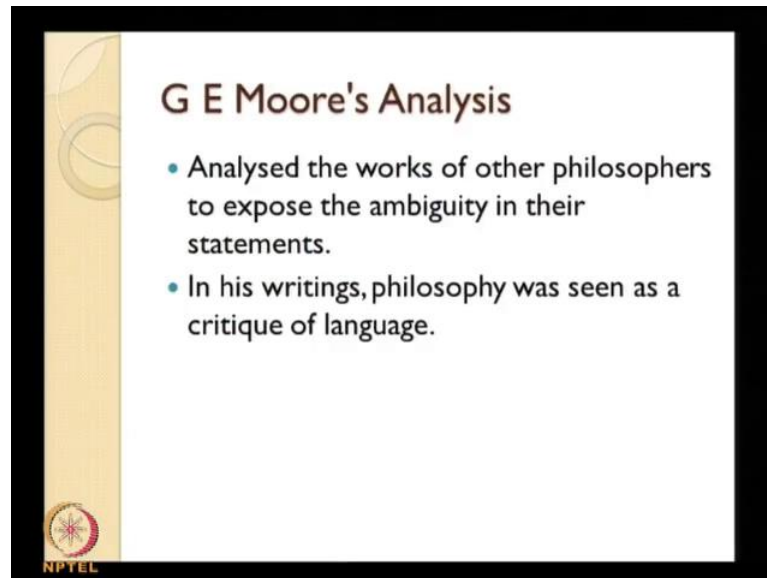
### Frege and Russell

- Reduction of Mathematics to Logic.
- All arithmetical concepts were to be defined in terms of logical concepts.
- All arithmetical truths were to be shown provable from logical ones.
- This further led philosophers to explore the possibilities of exact formal-logical analysis in regard to other areas of language use.

Now, when you come to the see the relationship between these two great thinkers was Frege and Russell, I have already indicated that they both try to reduce mathematics to logic I have to show that all arithmetical concepts were to be defined in terms of logical concepts which I have already pointed out and all truths arithmetical truths to logical truths, this further led philosophers to explore the possibilities of exact formal logical analysis in regard to other areas of language use. So, ones this is being done in the domain of mathematics philosophers, later philosophers started thinking why cannot we apply this to other domains of language used as well.

So, gradually in that way analytical philosophy or philosophy of language evolved.

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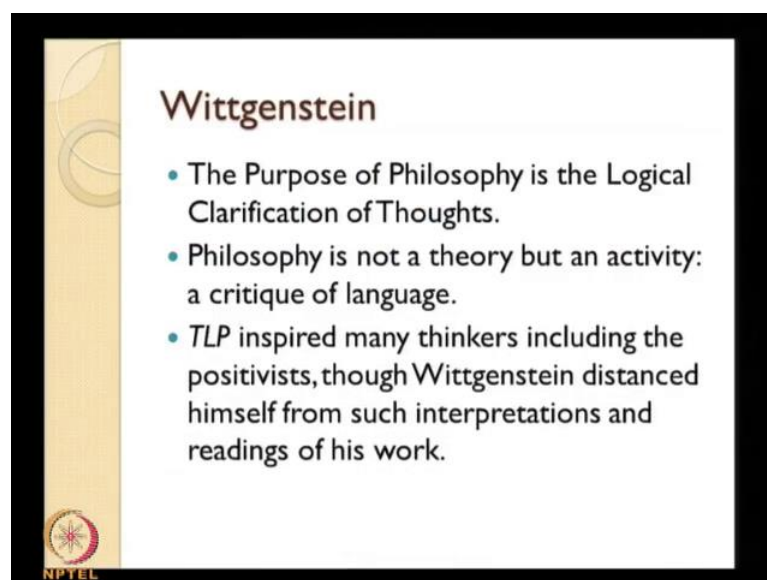
**G E Moore's Analysis**

- Analysed the works of other philosophers to expose the ambiguity in their statements.
- In his writings, philosophy was seen as a critique of language.

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In this context G E Moore specially, what he is done is that he analyze the works of other philosophers to expose the ambiguity in their statements. Primarily his own contemporaries even Bertrand Russell works he has analyzed, primary purpose of exposing the ambiguities in the works of its other philosophers and in his writings philosophy was seen a critique of language.

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**Wittgenstein**

- The Purpose of Philosophy is the Logical Clarification of Thoughts.
- Philosophy is not a theory but an activity: a critique of language.
- *TLP* inspired many thinkers including the positivists, though Wittgenstein distanced himself from such interpretations and readings of his work.

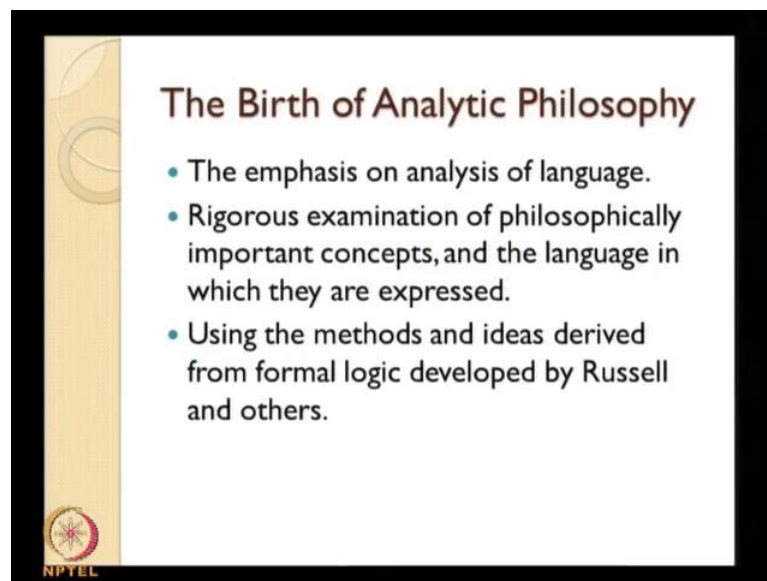
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Then when you come to Wittgenstein as I have already pointed out the purpose of philosophy is the logical clarification of thoughts. So, that is again a very interesting

aspect very interesting turn which we will be examining in detail in the next lecture that philosophy is not a theory, but an activity philosophy is a critique of language according to Wittgenstein and his Tractatus Logico Philosophicus which is here written as TLP inspired many thinkers including the positivists we can see that you know in the (Refer Time: 10:03) course of this lecture.

In the lecture say is the next lecture and following one would be concentrating on the contributions of these thinkers Wittgenstein and logical positivists and many others. So, they were all influenced by Wittgenstein Tractatus, though Wittgenstein distance himself from such interpretations and readings of his work he always consider that the readings of his Tractatus by the logical positivists and even Bertrand Russell himself was grossly misleading.

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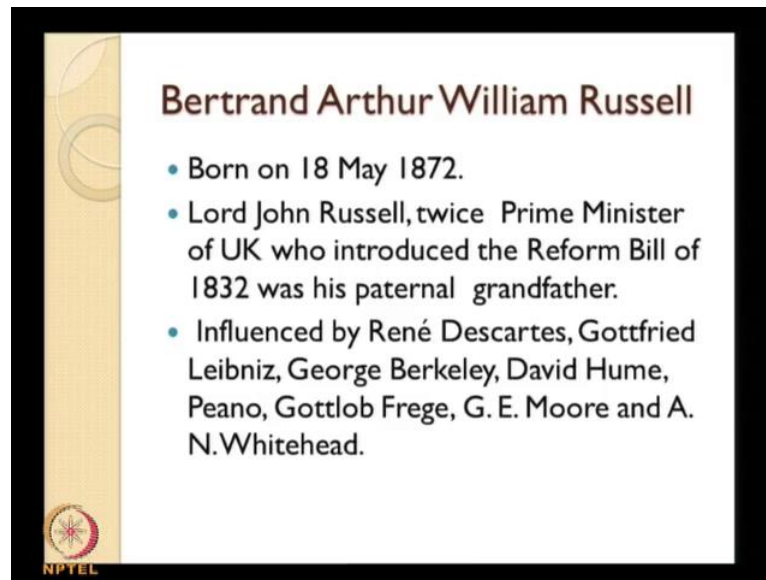


Now, let us go back to this original problem with which we are began this lecture, the birth of analytic philosophy the emphasis on analysis of language rigorous examination of philosophically important concepts and the language in which they have expressed.

So, all philosophical concepts like philosophers have been discussing since time memorial has been taken up for examination for analysis and they have all been sort of treated as concepts. So, when we have reduced all these problems to concepts, now they have becoming linguistic entities concepts of linguistic in nature. Now you conduct a linguistic analysis in the language in which they are expressed using the methods and

ideas derived from formal logic developed by Russell and others. So, in the context it needs to be mentioned that the very important contribution by Russell principles of mathematics which is actually considered as the bible of symbolic logic.

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**Bertrand Arthur William Russell**

- Born on 18 May 1872.
- Lord John Russell, twice Prime Minister of UK who introduced the Reform Bill of 1832 was his paternal grandfather.
- Influenced by René Descartes, Gottfried Leibniz, George Berkeley, David Hume, Peano, Gottlob Frege, G. E. Moore and A. N. Whitehead.

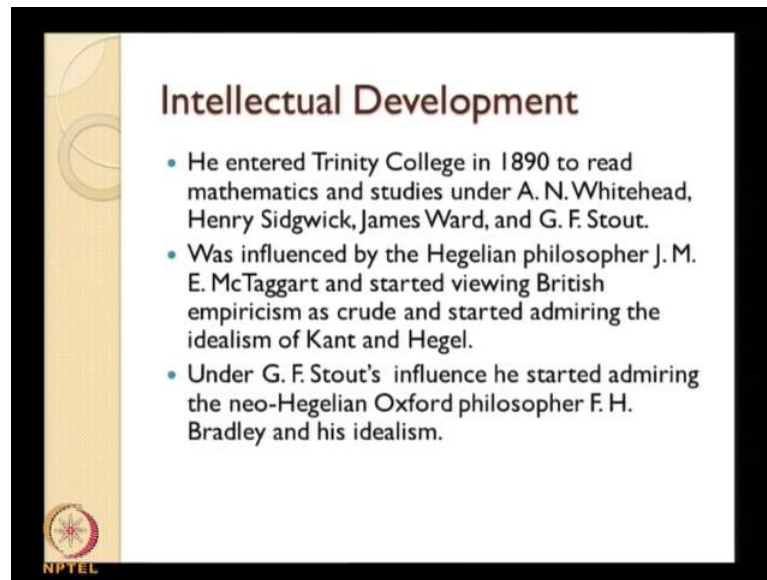
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So, we should devote a little more attention on the philosophy of Bertrand Russell here and the remaining part of this lecture would concentrate on his contributions to contemporary twentieth century analytic philosophy. Now Russell's philosophy, so Russell Bertrand Arthur William Russell was born on 18th may 1872; Lord John Russell who was twice prime minister of UK who introduced the famous reform bill of 1832 which was actually instrumental for the democratization process in Great Britain was his paternal grandfather and he was in his (Refer Time: 12:23) years we can see that Russell as a student of philosophy has thread widely and very intelligent very studios. He was influence by many thinkers including Rene Descartes and Leibniz interestingly there is a book which is supposed to be one of his initial publications in which he has wrote a book on Leibniz's philosophy and Leibniz was also interestingly a mathematician and a logician.

So, and also to some extend we can see that some of these elementary ideas about philosophy of language we can actually find their routes in Leibniz's philosophy. So, he was influenced by the Descartes, Leibniz, Berkeley, David Hume all are empiricist philosophers except Descartes. He was influenced by Descartes, Leibniz, Berkeley,

David Hume then we can see the influence of people like Italian logician Peano then Gottlob Frege then his own contemporary G E Moore and Alfred North Whitehead who is his own teacher with whom he has written this book jointly written this book and published principles of mathematics.

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### Intellectual Development

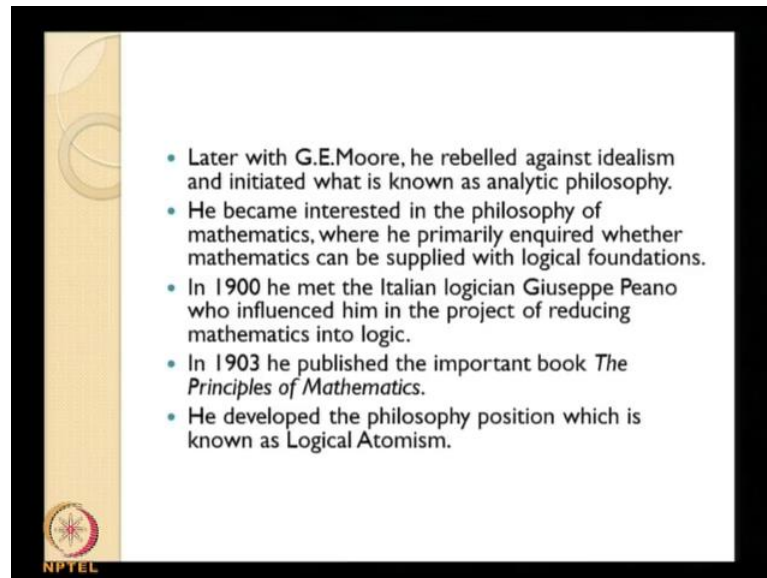
- He entered Trinity College in 1890 to read mathematics and studies under A. N. Whitehead, Henry Sidgwick, James Ward, and G. F. Stout.
- Was influenced by the Hegelian philosopher J. M. E. McTaggart and started viewing British empiricism as crude and started admiring the idealism of Kant and Hegel.
- Under G. F. Stout's influence he started admiring the neo-Hegelian Oxford philosopher F. H. Bradley and his idealism.

Now when we concentrate on his intellectual development, he entered Trinity College in 1890 to read mathematics and studied under Whitehead, Henry, Sidgwick, James Ward and G F Stout very prominent professors of philosophy during those days and each one of them have influenced Russell in unique ways. So, we can see that he was influenced by the Hegelian philosopher again, another very prominent influence is J M E Mc Taggart who was and started viewing British empiricism of who he has red of Lockean type as crude and started admiring the idealism of Kantian and Hegelian types and under G F Stout's influence he started admiring the neo-Hegelian oxford philosopher F H Bradley and his idealism, and actually Russell himself compasses that his initial period is he had devoted a lot to the study of Bradley's philosophy, Bradley's idealism.

His book appearance and reality was treated as one of the very important works in philosophy by Russell and he thoroughly read it and also developed a kind of position which is very close to the bradleylian of idealism and also the Hegelian type.



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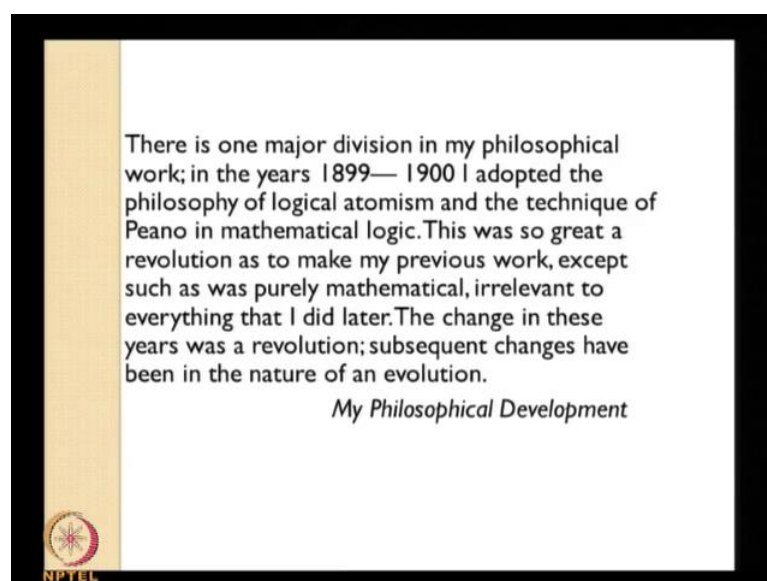


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- Later with G.E.Moore, he rebelled against idealism and initiated what is known as analytic philosophy.
- He became interested in the philosophy of mathematics, where he primarily enquired whether mathematics can be supplied with logical foundations.
- In 1900 he met the Italian logician Giuseppe Peano who influenced him in the project of reducing mathematics into logic.
- In 1903 he published the important book *The Principles of Mathematics*.
- He developed the philosophy position which is known as Logical Atomism.

Advocated a version of idealism during this period and later with Moore he rebelled against idealism and initiated what is known as analytic philosophy, we have already mentioned this he became interested in the philosophy of mathematics where he primarily enquired whether mathematics can be supplied with logical foundations. And in 1900 he met Italian logician Giuseppe Peano who influenced in him in the project of reducing mathematics into logic and in 1903, he published the important book the principles of mathematics, he developed the philosophy position which is known as logical atomism subsequently.

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There is one major division in my philosophical work; in the years 1899— 1900 I adopted the philosophy of logical atomism and the technique of Peano in mathematical logic. This was so great a revolution as to make my previous work, except such as was purely mathematical, irrelevant to everything that I did later. The change in these years was a revolution; subsequent changes have been in the nature of an evolution.

*My Philosophical Development*

So, we would be rather focusing more on this later contribution his philosophies called as logical atomism here is a quote from Russell himself I quote, there is one major division in my philosophical work in the years 1899 to 1900 I adopted the philosophy of logical atomism and the technique of Peano in mathematical logic. So, sort of two supplementary kind of approaches like one hand the logical atomism which is more realistic and empiristic on the other hand the techniques of mathematical logic. This was so great a revolution as to make my previous book except such as was purely mathematical irrelevant to everything that I did later the change in these years was a revolution, subsequent changes have been in the nature of an evolution.

So, Russell himself calls that the kind of changes he has undergone intellectual undergone during this period he himself cause a revolution because it has actually opened up his or rather made all his previous works which is routed in the idealistic tradition completely irrelevant to what he has done in his later period.

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**Idealism**

- The view that reality is fundamentally mental.
- During 1890s Russell was under the influence of German idealism.
- Held the Hegelian view that all reality is mental.
- Russell advocated a form of idealism much in the line of F.H. Bradley.
- The universe ultimately consists of a single Mind which experiences itself.

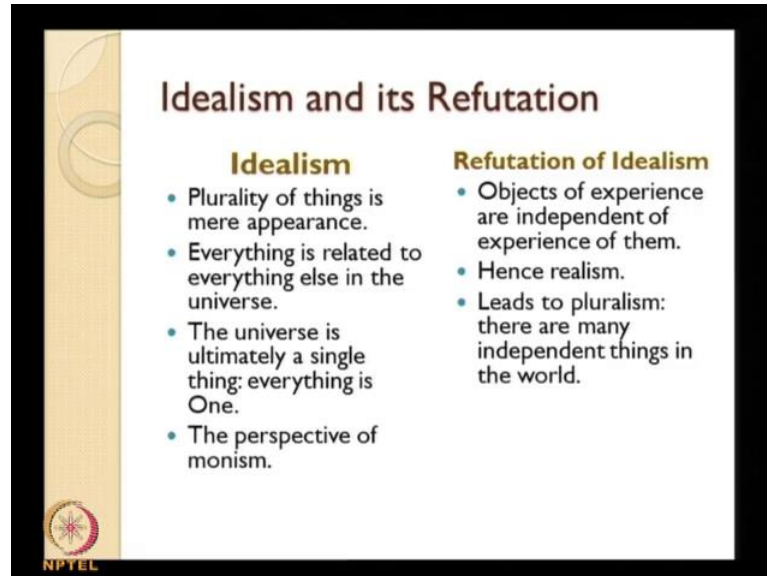
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Now, a very brief look into the period of idealism and how he later on refuted it idealism as all of us know is the view that reality is fundamentally mental or spiritual we can put into that way and during 1890s Russell was under the influence of German idealism held the Hegelian view that all reality is mental or spiritual.

We have already examine Hegel's philosophy, so what the implications are quite clear, Russell advocated a form of idealism much in the line Bradley and the universe

ultimately consists of a single mind which experiences itself, so this is the Hegelian approach.

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The slide is titled "Idealism and its Refutation" and is divided into two columns. The left column is titled "Idealism" and lists three bullet points: "Plurality of things is mere appearance.", "Everything is related to everything else in the universe.", and "The universe is ultimately a single thing; everything is One." The right column is titled "Refutation of Idealism" and lists three bullet points: "Objects of experience are independent of experience of them.", "Hence realism.", and "Leads to pluralism: there are many independent things in the world." The slide also features a decorative vertical bar on the left with a compass rose logo and the text "NPTEL" at the bottom left.

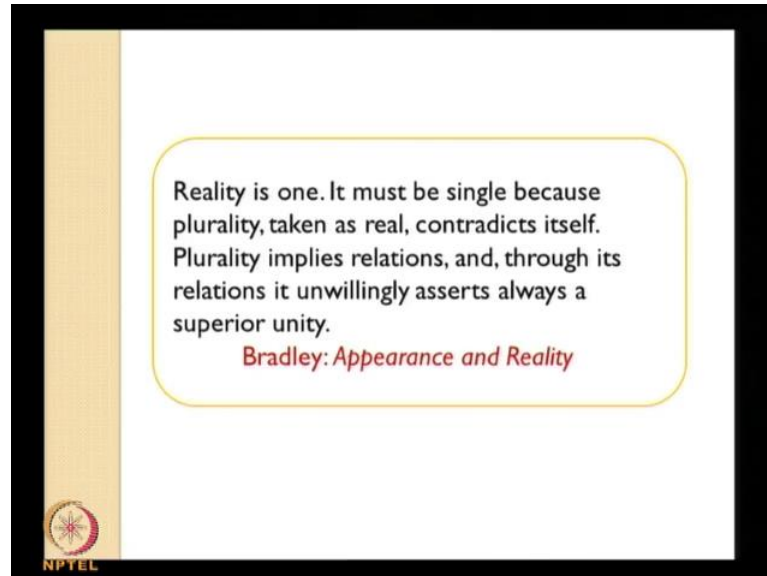
Idealism	Refutation of Idealism
<ul style="list-style-type: none"><li>• Plurality of things is mere appearance.</li><li>• Everything is related to everything else in the universe.</li><li>• The universe is ultimately a single thing; everything is One.</li><li>• The perspective of monism.</li></ul>	<ul style="list-style-type: none"><li>• Objects of experience are independent of experience of them.</li><li>• Hence realism.</li><li>• Leads to pluralism: there are many independent things in the world.</li></ul>

Now when it comes to the refutation of idealism; idealism would advocate a plurality of things is mere appearance, it would assert that or rather it would reject all plurality that excess and reduces everything to one single homogeneous spiritual substance for Hegel it is the absolute or it can be a mind or a spirit or whatever. And everything is related to everything else in the universe otherwise if the things are unrelated then one cannot later on reduce everything to one reality.

So, everything is ultimately reducible to each other or rather to a one single substance the universe is ultimately a single thing everything is one and the perceptiveness of monism is does advocated. But when we try to refute idealism objects of experience are independent of experience of them this is very realistic position idealism says that objects of experience are depend they actual depend on their mind as Berkeley would famously put it to be is to perceived, but here the refutation of idealism consisting holding realistic which position which says that objects of experience are independent of the experiencing mind hence it is a form of realism and it leads to a kind of pluralism because there are many independent things in the world as our experience suggest you know the world is constitutive of many number of particular things which are

independent of each other. So, from this context if you come to understand the position of idealism which is advocated by Bradley; here is a quote from Bradley.

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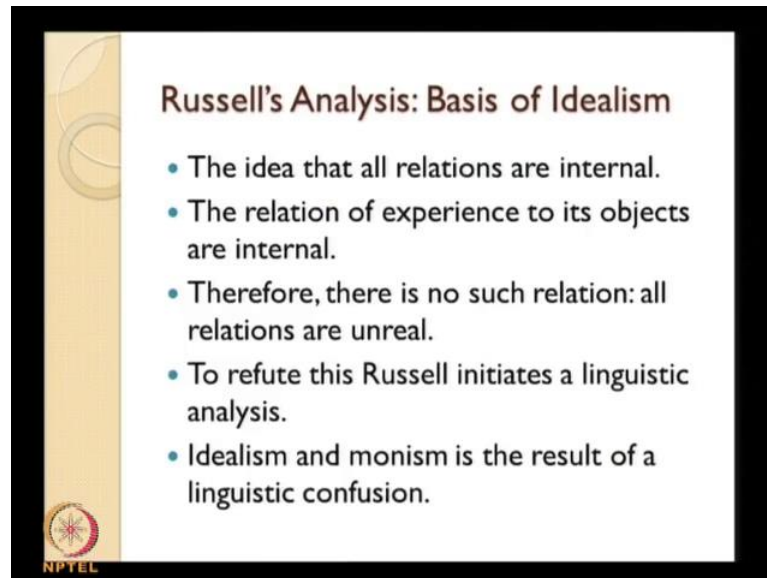
He says a quote - Reality is one; it must be single because plurality taken as real contradicts itself. Plurality implies relations and through its relations it unwillingly asserts always a superior unity; see this is called the paradox of plurality.

Plurality implies that there are different things and different things are related to each other because otherwise I mean things can exist either as totally unrelated or as related to each other, but even our common day to day experience suggest that things are related to each other and this inter relationship between things implies what, it implies that there is a superiority among things. So, in that sense Bradley says that plurality is self-contradictory and now Russell here comes up with very interesting analysis, which is actually a linguistic analysis, a language analysis, a criticism rooted in language analysis.

So, he analysis some of the possible statements which an idealist would make or rather to put it in different way. Some of those fundamental positions of idealism can be understood in terms of certain statements. Certain statements can be elaborated into an idealistic view. So, what Russell does is he identify such statements which would consist the gist of idealism or rather the crux of idealism and then analysis those statements and tries to exposed, tries to show that those statements involve a kind of contradiction, so this is what he does. So, here itself we can see that approach is linguistic or rooted in

linguistic analysis philosophy of language. Now here what it takes is the fundamental notion of idealism the idea that all relations are internal.

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**Russell's Analysis: Basis of Idealism**

- The idea that all relations are internal.
- The relation of experience to its objects are internal.
- Therefore, there is no such relation: all relations are unreal.
- To refute this Russell initiates a linguistic analysis.
- Idealism and monism is the result of a linguistic confusion.

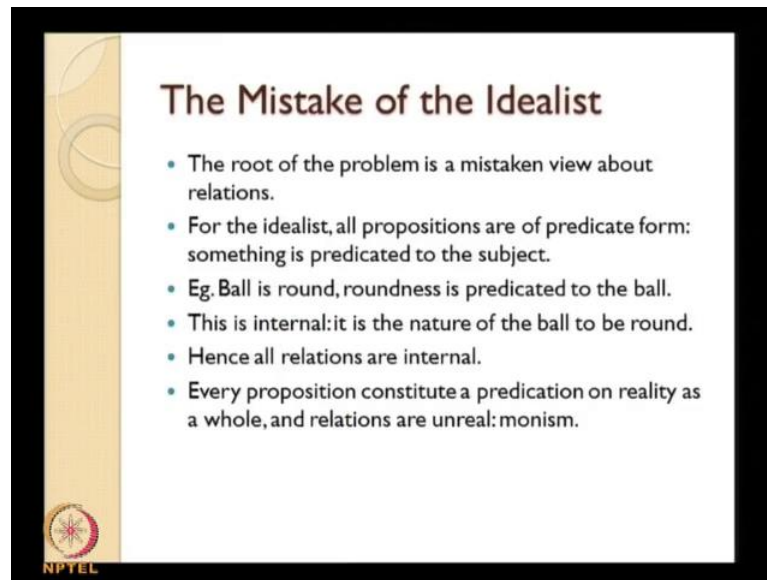
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Because if in relations are external which means that they are not rather intimate see for example, when I say there is there is a computer in front of me. There is a kind of relationship I am asserting that the computer is in front of me, but then this relationship cannot be treated as a kind of what you called internal relationship because there is nothing that makes me and this computer related in such a way that is should always and necessarily be in front of me, but say for example extension of a body where there is a relationship is actually internal, the roundness of a ball is again a kind of we can understood as a kind of a internal relationship because otherwise we own quality of ball.

But for Bertrand Russell says that for idealism to be true they should be asserting that all relations are internal, the relation of experience to it is objects are internal therefore, there is no such thing as relation or relations are unreal. Because if every relation is internal then that amounts to be saying that things are not related to each other because there are no things to be related there is only one thing because the different parts of that one thing is inter related or interrelated we can say that we do not have to rather is conceive that the reality is constitute of independent things, if they are independent then they are not related to each other, but there is relationship and every relationship is internal.

Now, to refute this Russell initiates a linguistic analysis, so this is where the contribution of Russell lies that he comes up with a linguistic analysis of this position. Idealism and monism is the result of a linguistic confusion and his analysis aims at exposing that confusion.

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The slide is titled "The Mistake of the Idealist" and contains a bulleted list of six points. The slide has a white background with a black border. On the left side, there is a vertical yellow bar with a circular logo at the bottom. The logo features a red and white design with the letters "NPTEL" below it.

### The Mistake of the Idealist

- The root of the problem is a mistaken view about relations.
- For the idealist, all propositions are of predicate form: something is predicated to the subject.
- Eg. Ball is round, roundness is predicated to the ball.
- This is internal: it is the nature of the ball to be round.
- Hence all relations are internal.
- Every proposition constitute a predication on reality as a whole, and relations are unreal: monism.

So, what is the mistake of the idealist Russell says the root of the problem is a mistaken view about relations there is a fundamental flaw a mistake about the way in which notion of relationship itself is conceived by the idealist. For the idealist all propositions are of subject predicate form something is predicated to the subject.

So, when I say for example, sugar is sweet I am attributing the sweetness to sugar. So, something is predicated I am predicating sweetness to the object sugar. So, here ball is round, roundness is predicated with the ball this is internal, it is a nature of the ball to be round, it is a nature of sugar to be sweet that is correct. So, to some extent the idealist are right as well as such propositions are concerned hence all relations are internal. So, from there they would conclude that all relations are internal which would ultimately amount to be saying that there are no relations.

Every proposition constitutes a predication on reality as a whole and relations are unreal. So, in that sense the monism is aggressively asserted because every relation is internal, so there are no relations there is only one entity.

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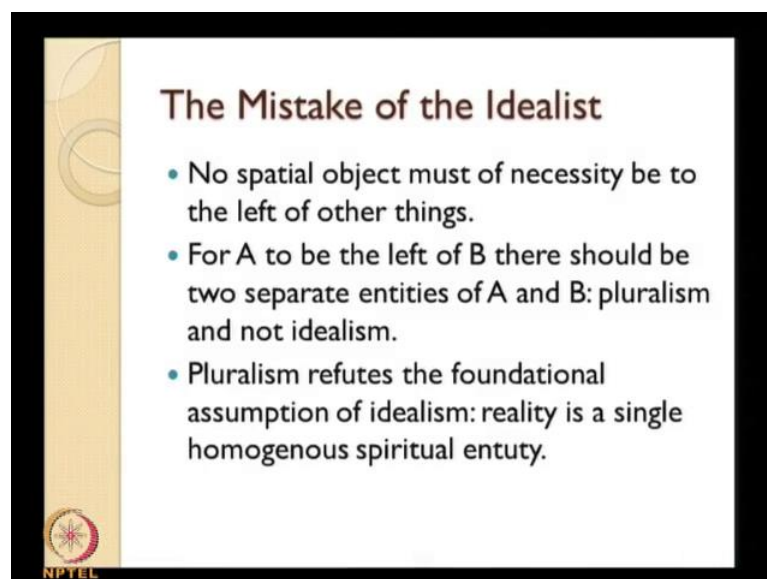
**The Mistake of Idealism**

- To wrongly consider that even relational propositions are of subject-predicate form.
- Eg. **A is to the left of B.**
- But this cannot be internal.
- We cannot say that it is internal to the nature of A to be the left of B.
- The relation **to the left of** does not belong intrinsically to any spatial object.

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So, now the mistake of idealism is according to Russell to wrongly consider that even relational propositions are of subject predicate form. Say for example, the computer is in front of me, A is to the left of B I can say on the computer is in front of me, but this cannot be internal, this relationship obviously is not internal because we cannot say that it is internal to the nature of A to be the left of B or it is internal to the nature of me to B in front of this computer.

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**The Mistake of the Idealist**

- No spatial object must of necessity be to the left of other things.
- For A to be the left of B there should be two separate entities of A and B: pluralism and not idealism.
- Pluralism refutes the foundational assumption of idealism: reality is a single homogenous spiritual entity.

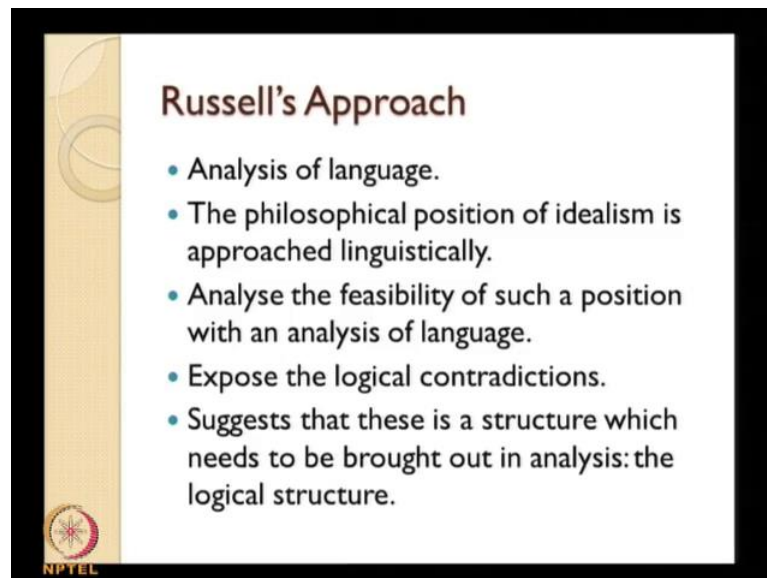
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The relation to the left of does not belong intrinsically to any spatial object or in front of does not belong to the nature of any object and again no spatial object must of necessarily be necessity be to the left of other things for A to be the left of B there should be two separate entities A and B, so pluralism and not monism. So, this is another interesting aspect because once you say that all relations are internal and your trying to show that relations are internal and which amounts to be arguing that there are no relations you are likely to make this mistake because to recognize that or to say that A is to the left of B there should be separate entities A and B, there should be separate entities like me and this computers so that the computer is in front of me which means that they are separate they are independent of each other pluralism and not monism.

So, pluralism refutes the foundational assumption of idealism which says that reality is a single homogeneous spiritual entity. Now let us see this is from this context will try to understand Russell's approach which is an analysis of language. The philosophical position of idealism is approached linguistically; we have seen the confusion the mistake is a linguistic this is the result of a linguistic confusion.

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**Russell's Approach**

- Analysis of language.
- The philosophical position of idealism is approached linguistically.
- Analyse the feasibility of such a position with an analysis of language.
- Expose the logical contradictions.
- Suggests that these is a structure which needs to be brought out in analysis: the logical structure.

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So, every philosophical problem according to Russell like philosophical problems or philosophical positions which these idealist and other philosophers, other metaphysicians have adopted implicitly contain certain propositions which ultimately can be analyzed and shown mistaken.

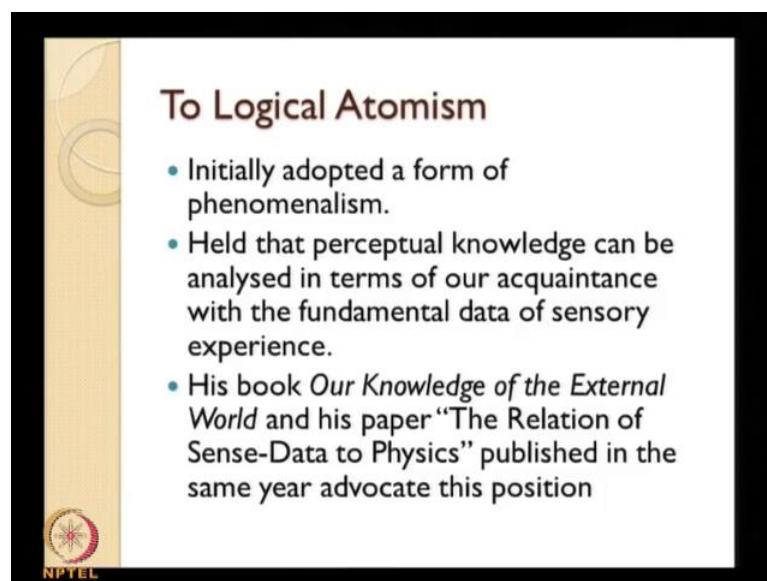


Analyze the feasibility of such a proposition with an analysis of language and it exposes the logical contradictions. It suggests that there is a structure which needs to be brought out in analysis which is a logical structure. So, this is again a very important aspect of contemporary analytical philosophy or philosophical language in general that there is a structure which needs to be brought out in analysis the logical structure. In fact, the next lecture we would see this Wittgenstein famously states in one location he says that language disguises thoughts, language disguises thoughts.

So, since the linguistic structure which is the command semantic structure which has the tendency to sort of express something explicitly, but the real meaning is hidden something which needs to be found by analyzing it structurally and when we talk about structure what is this structure, it is a logical structure which Russell talks about which would reveal itself in logical analysis. So, a logical analysis of propositions would reveal the logical structure, which is different from the kinds of structure which is syntactic grammatically structure. So, there is a distinction between the surface grammar of propositions and the debt grammar of proposition.


The syntactical structure and the semantical structure, the semantical structure is the logical structure which would be revealed in the process of analysis.

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**To Logical Atomism**

- Initially adopted a form of phenomenism.
- Held that perceptual knowledge can be analysed in terms of our acquaintance with the fundamental data of sensory experience.
- His book *Our Knowledge of the External World* and his paper "The Relation of Sense-Data to Physics" published in the same year advocate this position

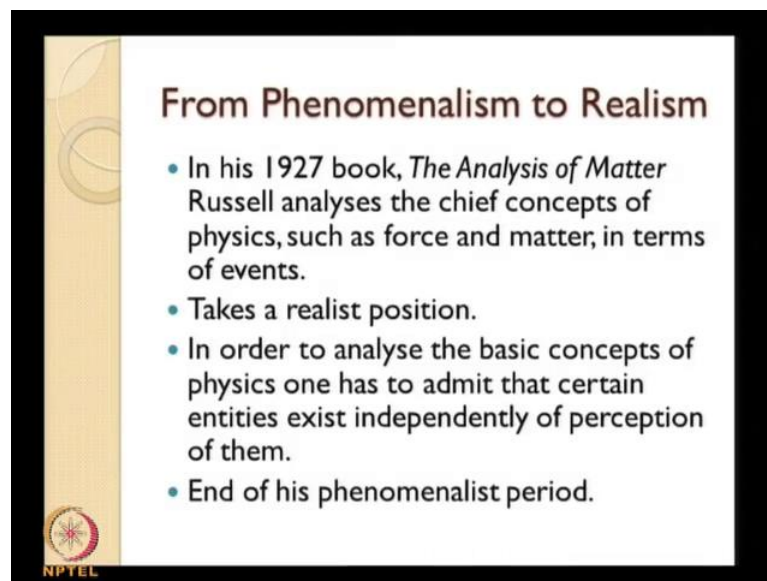
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Now, in this context let us see logical atomism which is actually which is two aspects logical atomism is Russell's metaphysical. He talks about logical atoms which Russell

beliefs constitutes language or reality, on the other hand this position was arrived at by means of performing a kind of logical analysis of language. So, in that sense it is linguistic as well as metaphysical we can put it in that way.

Now before we really enter into or really start discussing the logical atomism proper, let us see how we are reach there. Initially adopted a form of phenomenalism which says that perceptual knowledge can be analyzed in terms of our acquaintance with the fundamental data of sensory experience, so from the beginning itself there is an emphasis on sense experience. Russell is in that sense you can see and empiricist in essence an empiricist who acknowledges the importance of sensory data or sensory experience. His book our knowledge of the external world and his paper the relations of sense data to physics published in the same year advocate this position of phenomenalism.

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**From Phenomenalism to Realism**

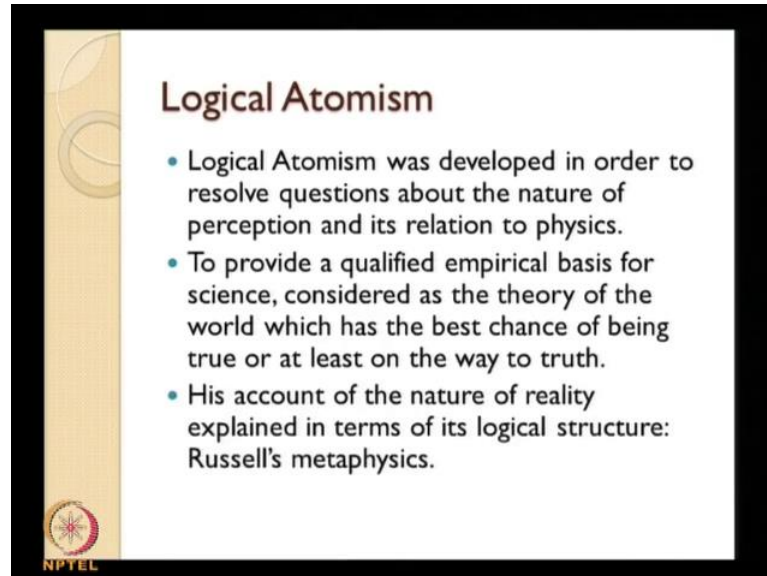
- In his 1927 book, *The Analysis of Matter* Russell analyses the chief concepts of physics, such as force and matter, in terms of events.
- Takes a realist position.
- In order to analyse the basic concepts of physics one has to admit that certain entities exist independently of perception of them.
- End of his phenomenalist period.

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Now in 1927 in his book the analysis of matter Russell analyses the chief concepts of physics such as force and matter in terms of events. Again you can see there is a kind of in approach to reduce things and here it takes an explicit realist position in order to analyze the basic concepts of physics one has to admit that certain entities like exist independently of perception of them. So, some sort of realism because physics deals with experience, the world there is experienced and the validity of the world that is experience needs to be assumed, needs to be presuppose by the physicist. So, in that sense he had to

adopt a kind of realistic position which would assert that entities exist independent of perception of them.

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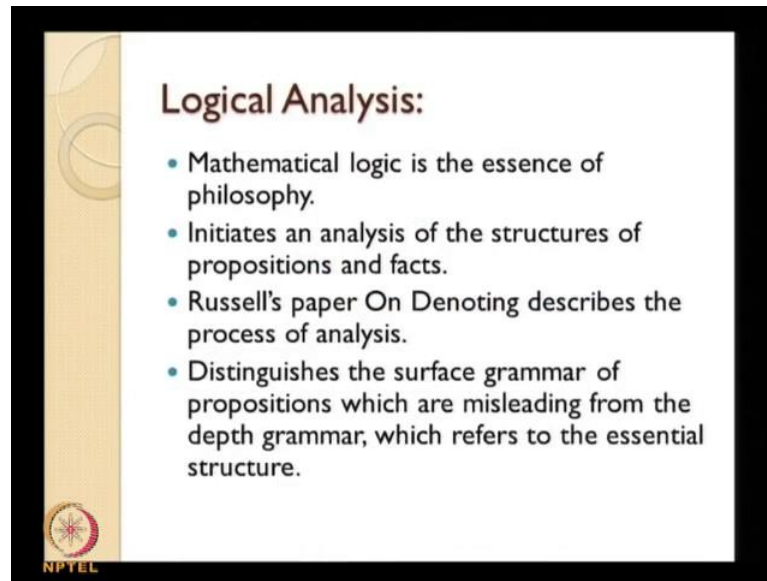
**Logical Atomism**

- Logical Atomism was developed in order to resolve questions about the nature of perception and its relation to physics.
- To provide a qualified empirical basis for science, considered as the theory of the world which has the best chance of being true or at least on the way to truth.
- His account of the nature of reality explained in terms of its logical structure: Russell's metaphysics.

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So, this is the period of phenomenalism or the phenomena spirit and from there you can see that the advancement to logical atomism is quite natural. Logical atomism was developed in order to resolve questions about the nature of perception and its relation to physics. So, on the one hand nature of perception your experience and then on the other hand the world, the world also has plays a role or the experience and reality are not really sort of you need to account for that. To provide a qualified empirical basis for science considered as the theory of the world which has the best chance of being true or at least on the way to truth and his account of the nature of reality explained in terms of it is logical structure which is Russell's metaphysics.

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**Logical Analysis:**

- Mathematical logic is the essence of philosophy.
- Initiates an analysis of the structures of propositions and facts.
- Russell's paper On Denoting describes the process of analysis.
- Distinguishes the surface grammar of propositions which are misleading from the depth grammar, which refers to the essential structure.

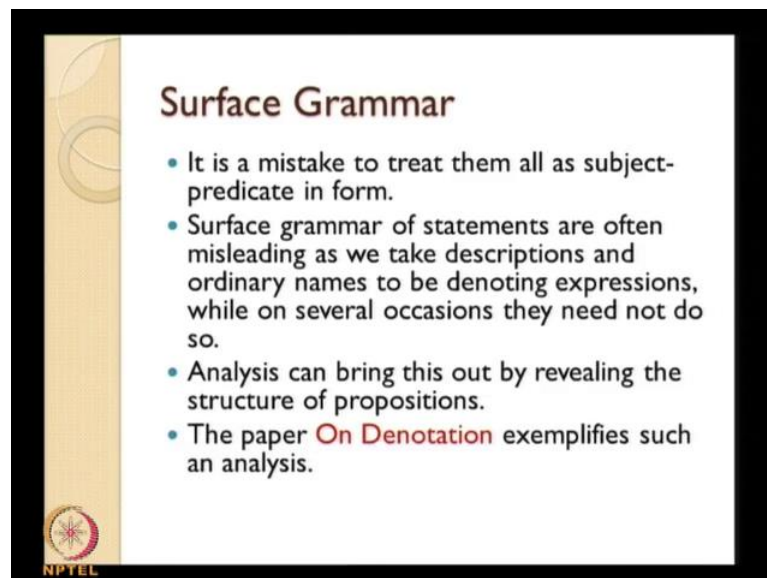
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So, what is this logical structure for that we have to see the logical analysis he initiates. He asserts that mathematical logic is the essence of philosophy; all philosophy mathematical logic the kind of logical structure he asserts and here he initiates an analysis of the structures of propositions and facts. So, here you can see the relationship between physics and language analysis because in physics, the method of analysis was adopted by physicists, by scientist they analyses the world and analysis the world into things and things are further analyzed into at molecules and atoms and further into atoms.

So, that is this is the process of analysis which is under taken by the by the scientist. So, a similar kind of analysis is initiated by philosophers in language. So, what in language it does us he the analysis of the structures of propositions and facts. So, there are two things on the one hand you have facts in the world. Say for example, there are 20 chairs in this class which is a fact there are two human beings in the class this is another fact, there is a bottle of water on the table there is a computer on the table these are all facts which I can express and when I express them in language, they become propositions. The (Refer Time: 33:35) linguistic counter part of a fact is called a proposition, the fact that there is a bottle on the table is expressed by the proposition quote and quote there is a bottle on the table.

So, fact and proposition which later on we would see when we discussed Wittgenstein he calls it a picture theory of language. Russell's paper on denoting describes the process of analysis which distinguishes the surface grammar which I have already mentioned, which is misleading and which is incorrect of propositions which are misleading from the depth grammar which refers to the essential logical structure of language and also of reality. Now this distinction of surface grammar from depth grammar lies at the very heart of the theory of analysis proposed by Russell and many others even Wittgenstein himself mentions about this it is a mistake to treat them all as subject predicate form, all propositions are not of subject predicate form.

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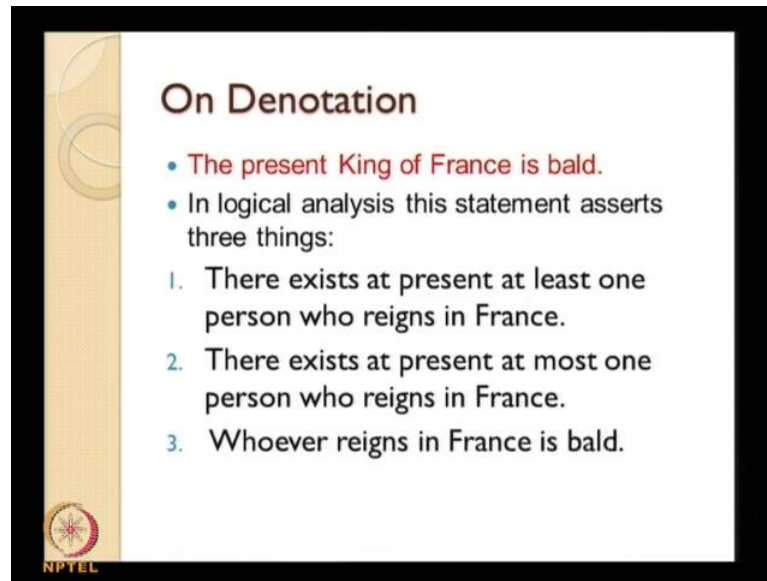
**Surface Grammar**

- It is a mistake to treat them all as subject-predicate in form.
- Surface grammar of statements are often misleading as we take descriptions and ordinary names to be denoting expressions, while on several occasions they need not do so.
- Analysis can bring this out by revealing the structure of propositions.
- The paper **On Denotation** exemplifies such an analysis.

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Surface grammar of statements are often misleading as we take descriptions and ordinary names to be denoting expressions while on several occasions they need not do. So, analysis can bring this out by revealing the structure of propositions, the paper on denoting exemplifies such an analysis. So, will just see very briefly an example which Russell himself initiates in his classic paper on denoting.

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The slide is titled "On Denotation" and contains a bulleted list of points. The first point is "The present King of France is bald." The second point is "In logical analysis this statement asserts three things:" followed by a numbered list of three items: "1. There exists at present at least one person who reigns in France.", "2. There exists at present at most one person who reigns in France.", and "3. Whoever reigns in France is bald." The slide also features a decorative vertical bar on the left and an NPTEL logo in the bottom left corner.

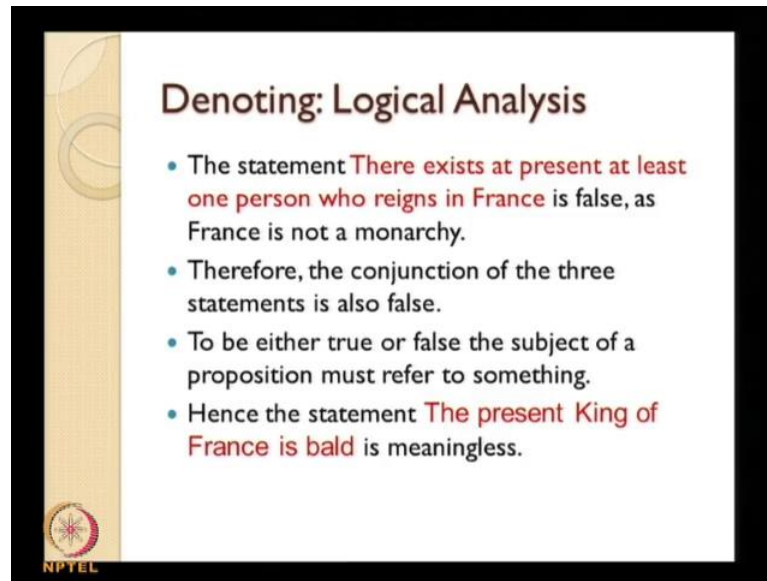
**On Denotation**

- The present King of France is bald.
- In logical analysis this statement asserts three things:
  1. There exists at present at least one person who reigns in France.
  2. There exists at present at most one person who reigns in France.
  3. Whoever reigns in France is bald.

So, he says the present king of France is bald, this is the statement Russell subjects to analysis; the present king of France is bald. In logical analysis this statement asserts three things see apparently this is a normal ordinary kind of statement which is absolutely very clear what is stated by it we have understand what is stated by it.

But now Russell what Russell does us he subjects this statement to logical analysis and says that it reveals three things. Number one there exists at present, at least one person who reigns in France. Number two there exists at least there it is there exists at present at most one person who reigns in France, at least one at most one only then it becomes the king whoever reigns in France is bald. So, the statement the present king in France king of France is bald actually can be analyzed to do these three propositions and only if all the three propositions are true, the statement the present king of France is bald is also true.

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### Denoting: Logical Analysis

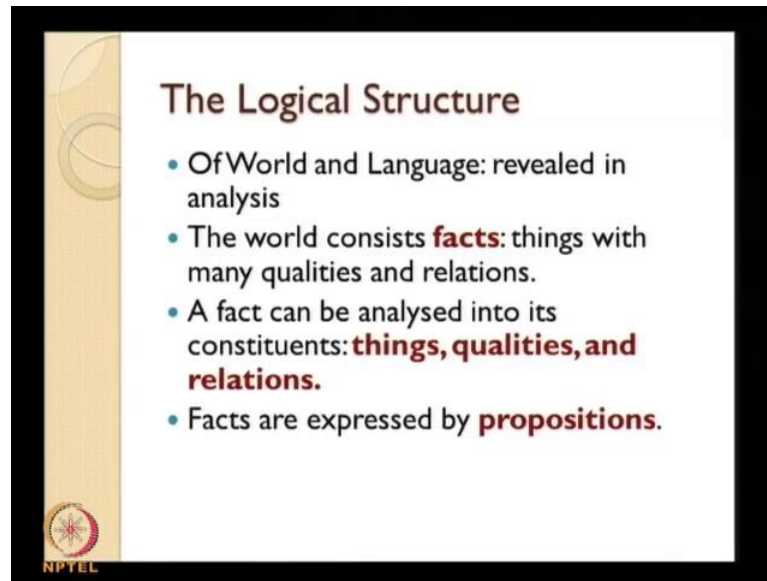
- The statement **There exists at present at least one person who reigns in France** is false, as France is not a monarchy.
- Therefore, the conjunction of the three statements is also false.
- To be either true or false the subject of a proposition must refer to something.
- Hence the statement **The present King of France is bald** is meaningless.

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Now, again the statement there exists at present at least one person who reigns in France is false, straight away because France is not a monarchy it is a democracy and there is no king of France, there is no object corresponding to the expression king of present king of France. Therefore, the conjunction of the three statement is also false to be either true or false the subject of the proposition must refer to something hence the statement the present king of France is bald is meaningless according to Russell.

So, analysis would reveal that this particular statement or this particular proposition is senseless or meaningless. So, philosophy might also contain or metaphysics might also contains several such propositions which in the course of analysis would reveal that or the structural analysis would reveal that such propositions are ultimately false they are meaningless they are senseless or nonsensical.

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The Logical Structure

- Of World and Language: revealed in analysis
- The world consists **facts**: things with many qualities and relations.
- A fact can be analysed into its constituents: **things, qualities, and relations**.
- Facts are expressed by **propositions**.

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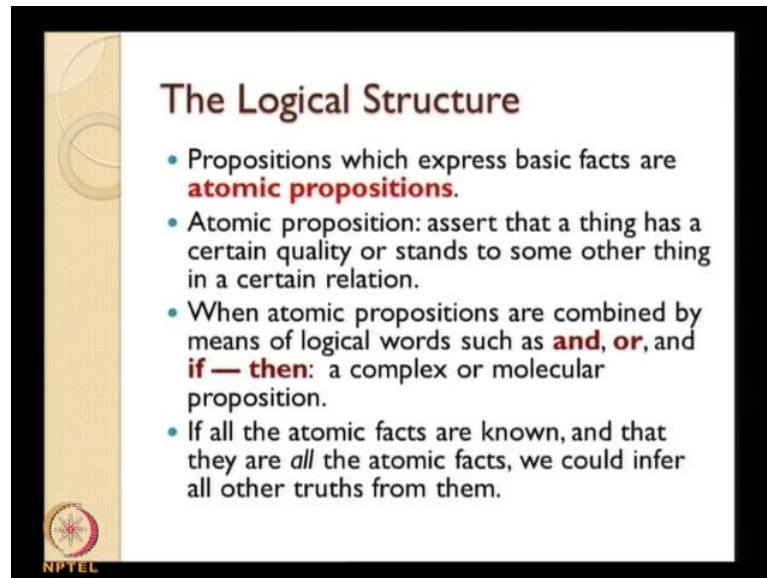
So, here comes the notion of logical structure of the world and of language which is revealed in analysis. So, both the logical structure of the world and of the language are revealed in the process of analysis which is just been initiated by Russell and this is actually summarizes Bertrand Russell logical atomism, this one or two slides it says that the world consists of facts, the world is full of facts things with many qualities and relations. So, all these are facts there are twenty chairs in this class, the apple is red in color, the sugar is sweet all these are sort of propositions were things with many qualities and relations existed.

A fact can be analyzed into it is constituents like things qualities and relations facts are expressed by propositions. So, we have seen all these things and propositions are forms of words asserted as true or false. When I say there are 20 chairs in this class this statement is either true or false because I can go and verify can count it and if there are only 19 chairs in this class then the statement which I made is false and if there are exactly 20 chairs in this class the statement is true, but if I say for example, there is one god in this classroom. So, applying Russell's method of analysis I want be able to show that or prove that there is one entity called god corresponding to the word god.

So, this sentence since there is no possibility of denoting is senseless or meaningless.



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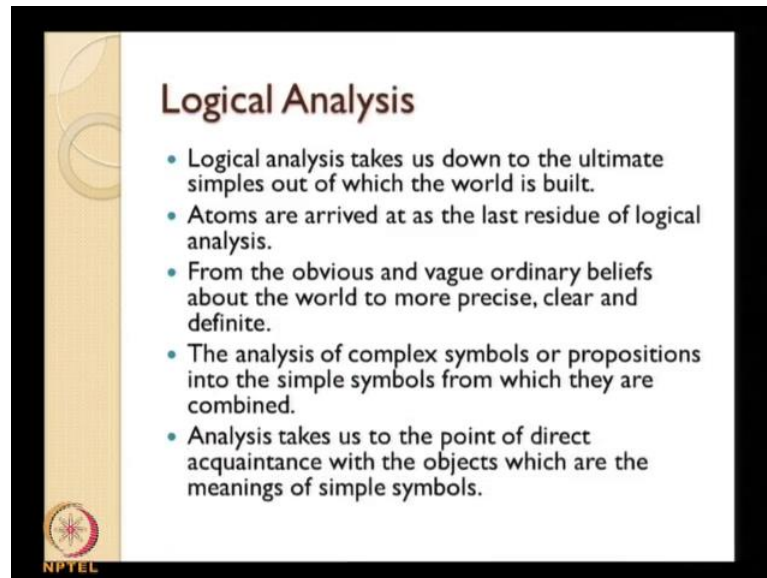
### The Logical Structure

- Propositions which express basic facts are **atomic propositions**.
- Atomic proposition: assert that a thing has a certain quality or stands to some other thing in a certain relation.
- When atomic propositions are combined by means of logical words such as **and, or,** and **if — then:** a complex or molecular proposition.
- If all the atomic facts are known, and that they are *all* the atomic facts, we could infer all other truths from them.

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Propositions which express basic facts are atomic propositions, so now we come to his analysis. So, analysis of propositions is what language analysis consist of, so you analyze every proposition into parts and then ultimately they would reveal the atomic structure of the proposition which are logical atomic propositions. Atomic proposition asserts that a thing has a certain quality or stands to some other thing in a certain relation. When atomic propositions are combined by means of logical words such as or, if then that is the kind of hypothetical and his conjunction or his disjunction. A complex or molecular proposition is what the result is and if all the atomic facts are known and that they are all the atomic facts we could infer all other truths from them.

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**Logical Analysis**

- Logical analysis takes us down to the ultimate simples out of which the world is built.
- Atoms are arrived at as the last residue of logical analysis.
- From the obvious and vague ordinary beliefs about the world to more precise, clear and definite.
- The analysis of complex symbols or propositions into the simple symbols from which they are combined.
- Analysis takes us to the point of direct acquaintance with the objects which are the meanings of simple symbols.

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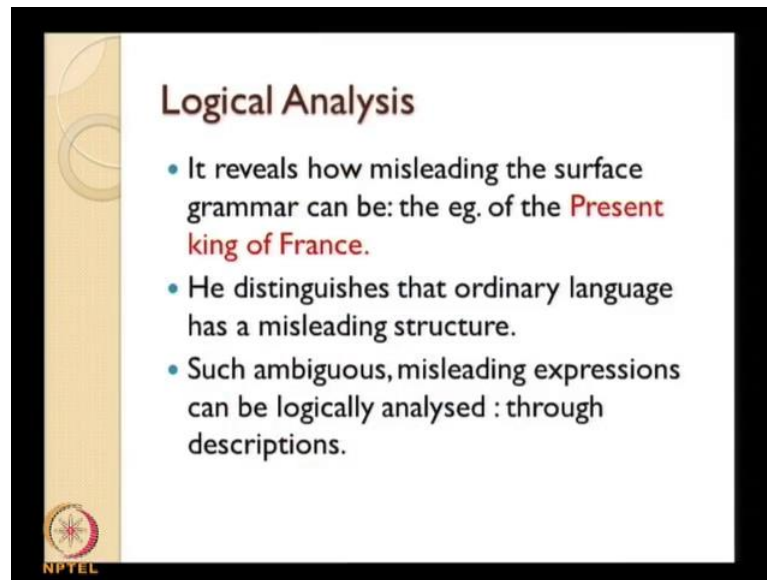
So, this is in summary the kind of logical atomism he advocates, now the logical analysis which takes us down to the ultimate simples out of which the world is built are the kind of entities which analysis take us to and atoms are arrived as the last residue of logical analysis. So, as the final point like in physics when the physicist goes on analyzing the world the world would be analyzed and further reaches a point where further analyzes would become impossible, those points are called atoms.

Molecules can be further divided into atoms and atoms are considered as indivisible, they are hypothetical entities which are indivisible and for Russell language analysis would also take us to such a position where further analysis of proposition would become impossible they are atoms or atomic propositions. From the obvious and vague ordinary beliefs about the world to more precise clear and definite kind of a knowledge, so what happens is what we gain from such an analysis is precisely this; in our day to day normal day to conversation there are many things which are ambiguous there, we take for granted many things and we do not care we do not bother about analyzing things, we are do not really care about the clarity of our thoughts. So, the obvious and wake ordinary beliefs about the world to more precise clear and definite knowledge about the world.

So, this is what analysis takes us to and the analysis of complex symbols or propositions into the simple symbols from which they are combined. Analysis takes us to the point of

direct acquaintance with the objects which are the meanings of simple symbols. So, here again you can see the empiricism they finally, you reach a point where there is a very directly one to one relationship between a simple which we use in language a simple and simple symbol and the object in the world.

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The slide is titled "Logical Analysis" and contains three bullet points. The first bullet point discusses the misleading nature of surface grammar, using the example of "the Present king of France". The second bullet point states that ordinary language has a misleading structure. The third bullet point notes that such ambiguous and misleading expressions can be logically analyzed through descriptions. The slide also features a decorative vertical bar on the left and an NPTEL logo in the bottom left corner.

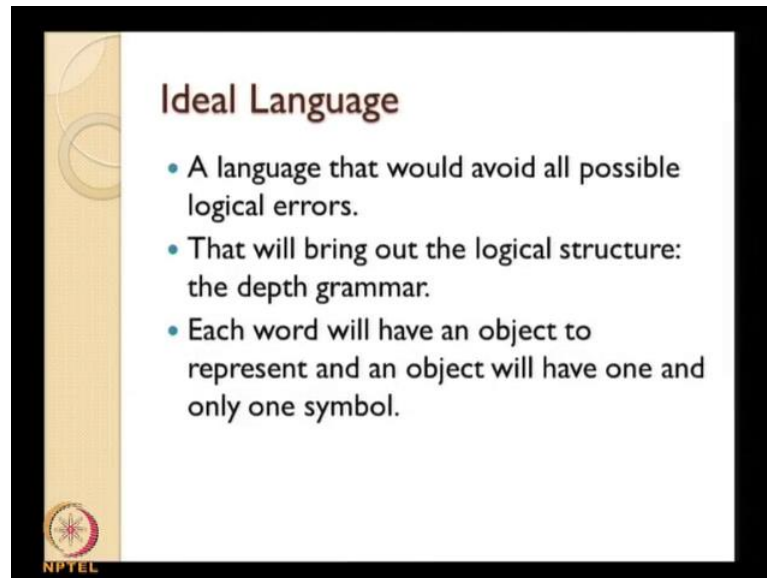
### Logical Analysis

- It reveals how misleading the surface grammar can be: the eg. of the **Present king of France**.
- He distinguishes that ordinary language has a misleading structure.
- Such ambiguous, misleading expressions can be logically analysed : through descriptions.

And it reveals how misleading the surface grammar can be for example, the present king of France, it is misleading because grammatically it says that the present king of France is bald we all. So, feel that there is it is a quite legitimate meaningful expression and we would try to understand it, but it is actually nonsensical statement according to Russell because there is no object corresponding to the description the present king of France.

He distinguishes that ordinary language has a misleading structure, all ordinary language because in ordinary language we use the same word to denote different things or the different words to stand for the same object. So, all such confusions might arise as a result of employing ordinary language and again in metaphysics philosophers also commits such mistakes. Such ambiguous misleading expressions can be logically analyzed though descriptions. So, this is what the major contribution of the area of descriptions or on denoting, this will reveal the logical structure ultimately of language and here comes the idea of ideal language which is actually proposed by Frege, it is there in Frege's, Frege calls about a concept script which is an ideal language where each word stands for an object and only one and one object.

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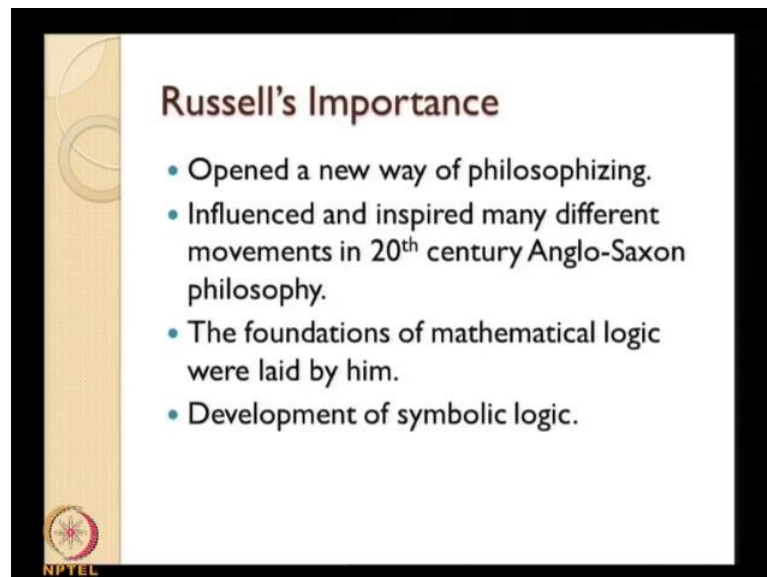
**Ideal Language**

- A language that would avoid all possible logical errors.
- That will bring out the logical structure: the depth grammar.
- Each word will have an object to represent and an object will have one and only one symbol.

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So, this avoids all the confusions, so this is a kind of construction of an artificial language which for technical purposes which would avoid all confusions in thinking that will bring out the logical structure which is the depth grammar, each word will have an object to represent and an object will have one and only one symbol.

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**Russell's Importance**

- Opened a new way of philosophizing.
- Influenced and inspired many different movements in 20<sup>th</sup> century Anglo-Saxon philosophy.
- The foundations of mathematical logic were laid by him.
- Development of symbolic logic.

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So, that is it now let us conclude our discussion on the contributions of Russell's philosophy with not on his importance in the history of philosophy. He has opened a new way of philosophizing, no doubt because as I pointed out it was largely due to the works

of G E Moore and Bertrand Russell, the current the present day analytical philosophy was born.

So, their contributions were very interesting and very valid during those days they clearly initiated a break with the tradition and influenced and inspired many different movements in 20th century Anglo Saxon philosophy. You can see that after this logical positivism straight away there is a very clear influence like people like A J Ayer who is English philosopher, British philosopher also a logical positivist he was part of the logical positivist movement from Britain. So, he has taken Russell's work to the (Refer Time: 45:11) circle where they logical positivist use to meet and discussed them elaborately then Wittgenstein himself was influenced by Russell then foundations of mathematical logic were almost single handedly we can say led by him.

I mean, I do not want to say foundations, but at least most of the important modern contributions to symbolic logic and mathematical logic, the foundations are to be found in Russell's work. His development of symbolic logic owes in a lot, so we will conclude our discussion on Russell's contribution to analytical philosophy. Actually Russell is a multifaceted figure is not just an analytic philosopher or a philosopher of language, he has published more than nearly about 75 books during his life time and one noble prize for literature for his contributions to philosophy and again he was also very actively participated in social and political affairs, he was part of the movement which initiated the resistance against Germans during the second world war. Then also has written extensively about morality, morals, religion his books like marriage and morals another one is why I am not a Christian; all these are path breaking works in many domains.

But in spite of all his contributions into a variety of areas, the most important contributions of Russell as Wittgenstein rightly pointed out lie in the domain of mathematical logic, where he is still relevant absolutely no doubt about it, but his status as a philosopher as was questioned by many in future philosophy and as far as a philosopher Russell is concerned as a philosopher his influence is not much today compared to (Refer Time: 47:19) we the influence Wittgenstein has on contemporary thinking. But at the same time we should not forget the fact that Wittgenstein himself was influenced by Russell, who was once upon a time Wittgenstein's mentor in Oxford and later on was responsible for developing some of his ideas, but of course, Wittgenstein developed a philosophy independent of his master which Russell himself

was not very happy with. But his contributions to philosophy of language, mathematical logic are phenomenal.

So, we will wind up this lecture here next lecture will be on the philosophy of Wittgenstein which is very closely related to one aspect of Wittgenstein philosophy we can see is very closely related to the logical atomism which Russell developed or rather Russell himself was influenced by Wittgenstein's thinking to some extent we can say in that way. So, we will see that in the next lecture till then.

Thank you.