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Now what we have been doing that as we have already discussed indeed scientific practices are not exhausted in terms of our puzzle solving activities day to day research activities or through norm bound science normal science okay science which is guided by only day to day research activities okay that is we have already discussed if normal science is the tradition bound activity then revolutionary science is tradition shattering activity.

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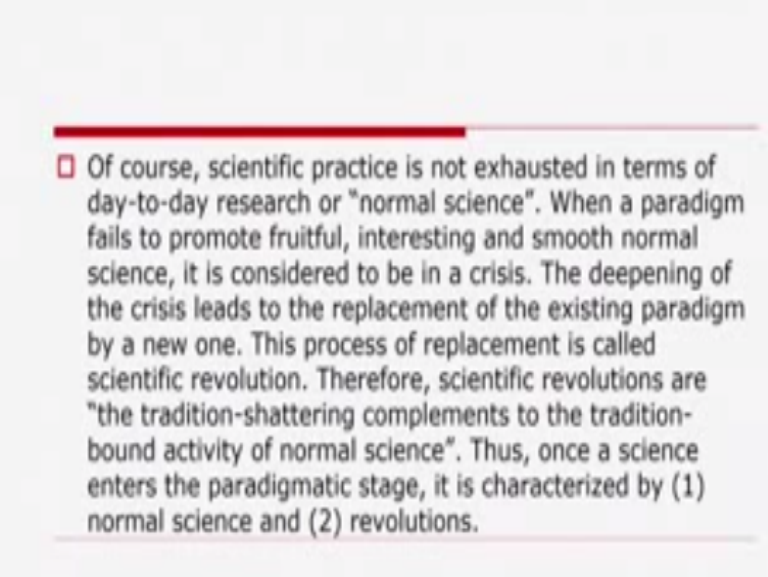

Okay that is what when a pyridine fails to promote truthful interesting and smooth normal science okay it is considered to be in a crisis the depending of the crisis leads to the replacement of the existing pyridine by a new one then we must go ahead with a new pyridine and this replacement is called scientific revelations that is why as we just now said that no normal science

is a tradition bound activity where as revolutionary science is a tradition shattering complements to the tradition bound activity of normal science and thus once a science enters the paradigmatic stage.

Stage of model of in quick paradigmatic in quack okay it is characterized by first normal science and the revolutionary science and in sheer temporal terms normal science.

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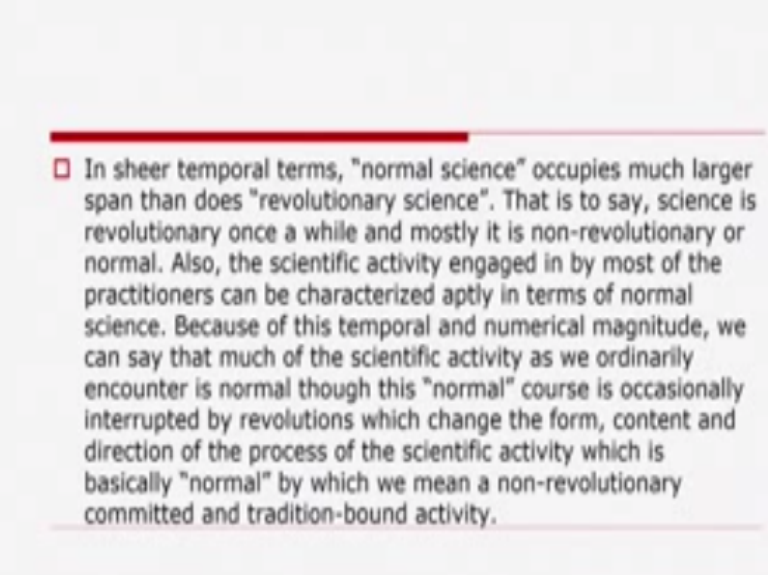

Occupies much larger space that does revolutionary science may occur once a while but you will find more often than not okay non revolutionary or non bound or normal science that is why that is to say science is revolutionary once a while and mostly it is non revolutionary or normal interactive also the scientific character activity engaged in by most of the practitioners can be characterized aptly in terms of normal science this temporal and numerical magnitude okay.

Try to understand this we can say that much of the scientific activity as we ordinarily encounter is normal though this normal course is occasionally interpreted by a revolutions which change the fog contained in direction of the process of the scientific community which is basically normal by which we mean a non revolutionary committed activity by which we mean a tradition bound activity.

Okay from here onward what we are going to do we are trying to desalinate different stages we started with pre paradigmatic stage paradigmatic stage normal science and now how we are

going to have crisis through enormous okay and then it will then be a followed by I mean normal science and enormous crisis you said then we will encounter a new pyridine mediated by revolutionary science scientific revolution normal science demands.

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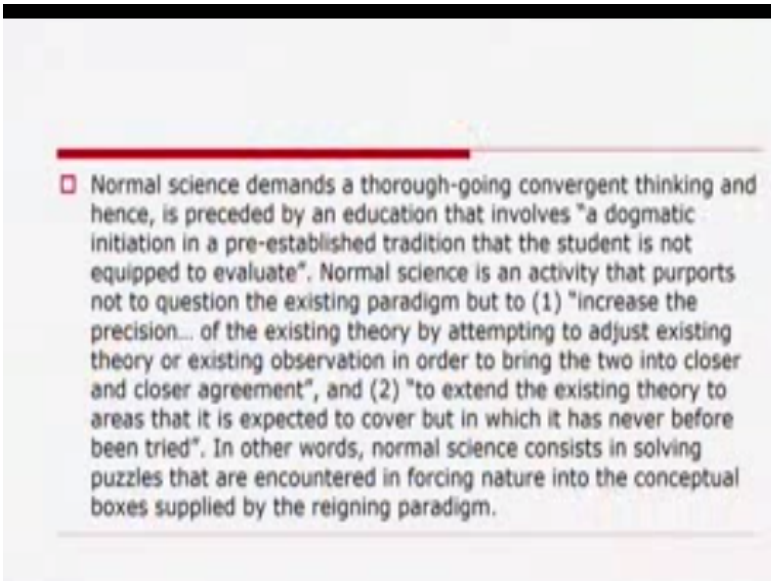

A thorough going convergent thinking okay because normal science is practiced in the context of a pyridine that is why in the per paradigmatic stage as we as witnessed divergent thinking in the case of creative areas like art literature new philosophy even in medicine okay, but within a pyridine within the paradigmatic stage normal science demands a thorough going convergent thinking and hence is preceded by an education that involves a dogmatic initiation in a per established tradition that the student is not equipped to evaluate.

Normal science is an activity that popper not to question the existing pyridine because of the convergence in thinking but to increase the pertinent I am counting from Kuhn the structure of scientific revolutions of 1962 where Kuhn suggest that normal science is an activity that poppers not to interrogate the existing pyridine but to increase the precision of the excising theory by attempting to adjust existing theory or existing observation in order to bring the two into closer and closer except first.

Secondly normal science is an activity that poppers not to interrogate the existing pyridine but to extended the existing theory to areas that it is expected to cover but in which it as never before been tracked in others normal science consists in serving puzzles that are encounter enforcing

nature into the conceptual boxes supplied by the remaining pad by the pyridine which rules the roast by the existing pad.

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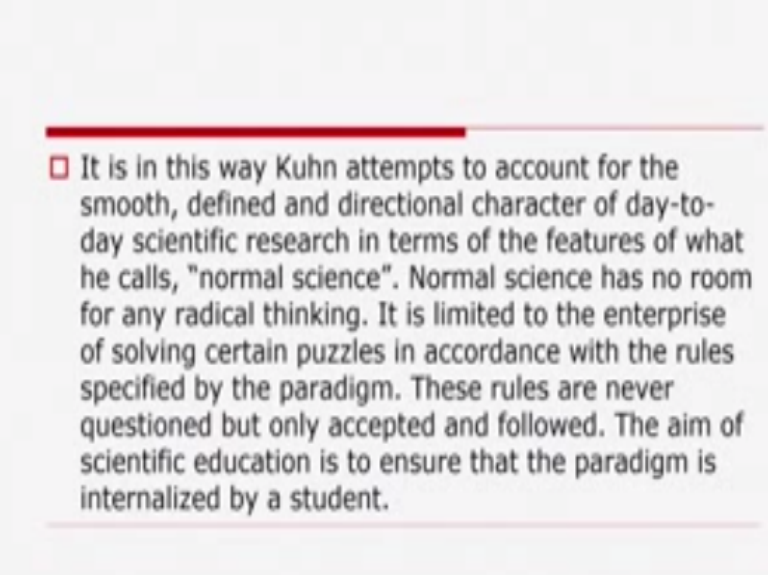

It is in this way Kuhn attempts to account for this smooth defined and directional character of day to day scientific research in terms of the features of what he calls normal science and normal science as no room for and radical thinking because radical thinking is the hallmark of scientific revolution I mean revolutionary science where as normal science as room for any radical thinking.

And normal science also is limited to the enterprise of solving certain puzzles in accordance with the rule specified by the existing pyridine existing model and these rules these rules of the excising pyridine or never interrogated but only accepted in followed that is why prairie to Einstein or prier colonizers for example in astronomy tolum is clean astronomy where never questioned but only excepted in followed.

And the aim of scientific education is to ensure that the pyridine is internalized by a student now we do not want to question the existing pyridine the only thing is that we need to internalize the existing pyridine in other words the professional trending in science consists in excepting.

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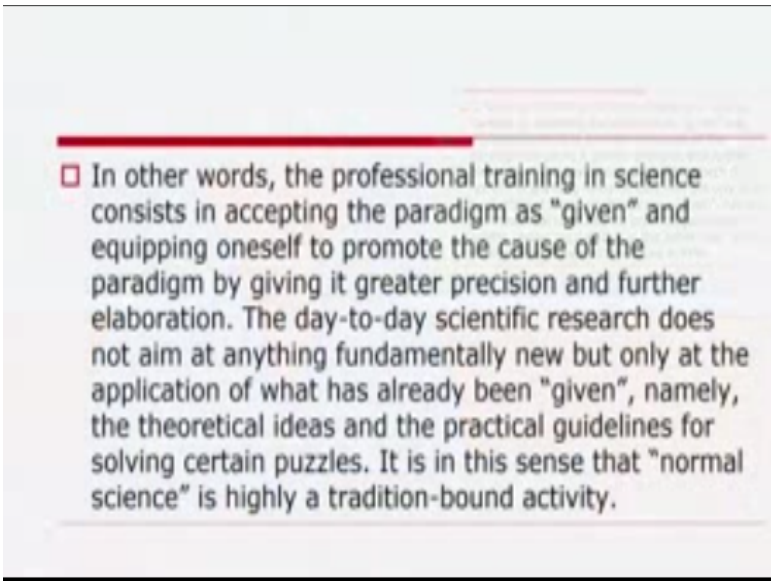

The pyridine as given and equipping oneself to promote the cause the paradigm by giving it greater procedure and further elaborates and the day to day scientific research there is not a aim at anything fundamentally new but only at the application of what is already have been given namely the theoretical ideas and the practical guidelines are solving certain process, it is in this sense that normal science is not a revolution that is you know is not a part of revolution science it is highly or tradition it never questions the existing pattern okay.

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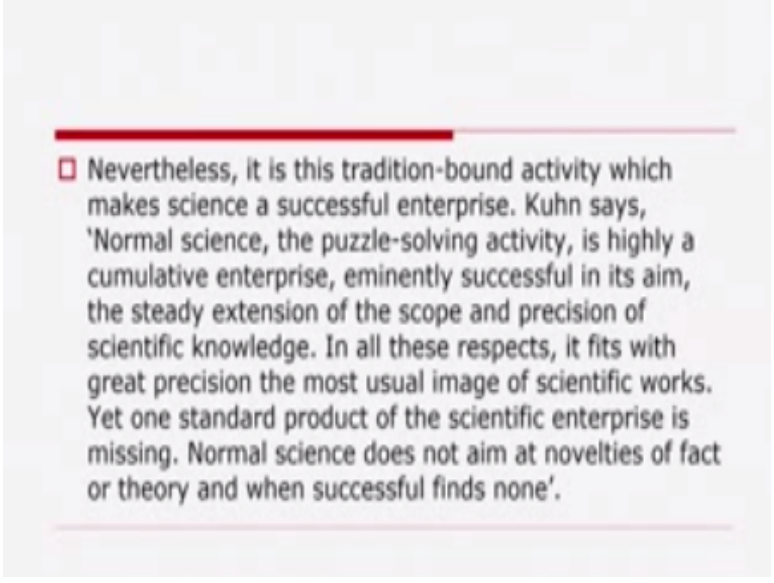

However it is this normal science it is this tradition bound activity which make science a successful enterprise Kuhn says that normal science the persons solving activity, is highly

cumulative enterprise eminently successful in it is aim, the steady extension of this scope and precise in a scientific knowledge in all these respects, it fits with I mean normal science fits with great precise and the most usual image of scientific works, yet one standard product of the scientific enterprise.

Is missed that is normal science there is not aim at novelties of fact or theory and when successful finds in okay, I mean normal science all is follows the pattern of the tradition the pattern of existing paradigms there is not aim at novelties of fact or theory okay.

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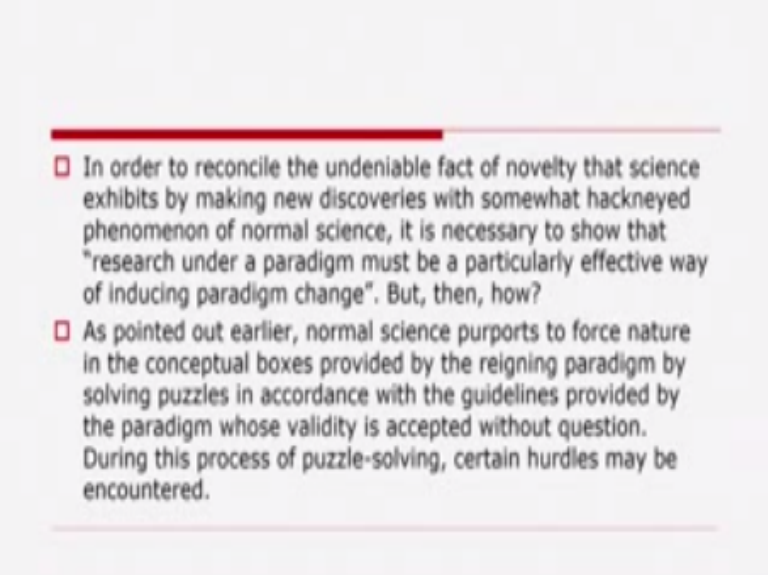

Okay in order to reconcile the undeniable fact of novelty that science exhibits according to cone by making new discoveries with somewhat at hack need phenomena of normal science it is necessary to so that research under a paradigm must be paradigm a particularly effective way of a inducing paradigm but they harm if paradigms undergo change under the normal scientific tradition, with normal science does not question the existing paradigms then how can paradigms undergo transfer these.

As pointed how can paradigms undergo transfer as pointed out earlier okay normal science poppers to force nature in the conceptual boxes provided by the running paradigm or existing

paradigm the dominant paradigm by solving process in accordance with the rules and regulations and guidelines provided by the existing paradigm whose validity is accepted without question and during this process of puzzle solving certain hurdles may be account it, because the because if the existing paradigm.

Cannot solve the problems or through the guidelines of normal science then, then certain hurdles certain obstacles certain hindrances may be encounted we then speak of anonyms what are the what do we mean by the a normally we mean unexpected our earn anticipated occurrences are happen okay, when we speak of anomaly that is an anomaly arises when puzzle remains puzzle define every attempt to resolve it within the frame work of the existing, when puzzle does in gets solved then.

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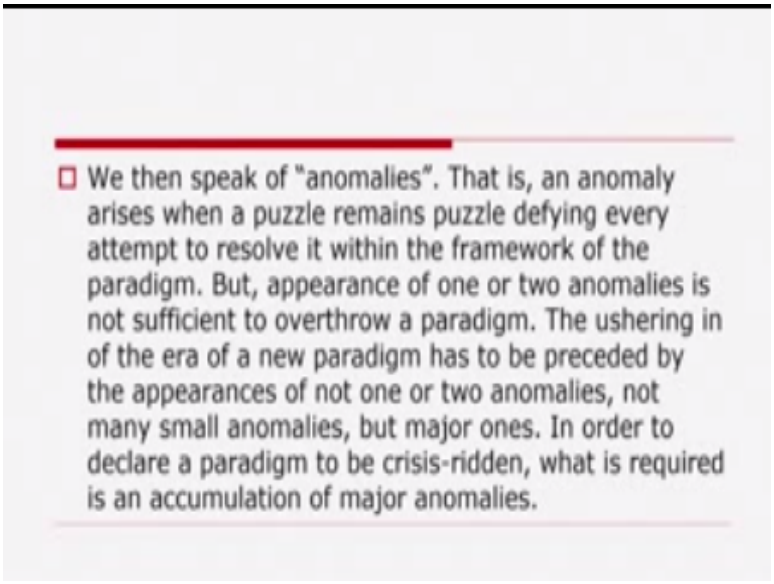

Puzzle remains a puzzle that is where we encounted certain problems within the normal scientific tradition but appearance of one or two anomalies is not adequate to over through an existing paradigm because you may say that no these are only the exceptional cases, but only through accept only by looking at exceptional cases we do not in general over through a dominant paradigm and existing paradigm okay, the ushering in a the era of a new paradigm has to be preceded by the appearances.

Of not one or two anomalies not many small and anomalies but major once in order to declare a paradigm to be crisis-ridden what is required is an accumulation of many, many major anomalies

these unexpected un anticipated occurrences or happenings must be accumulated must be major once and there must be accumulated in such a manner to declare that a paradigm is crisis.

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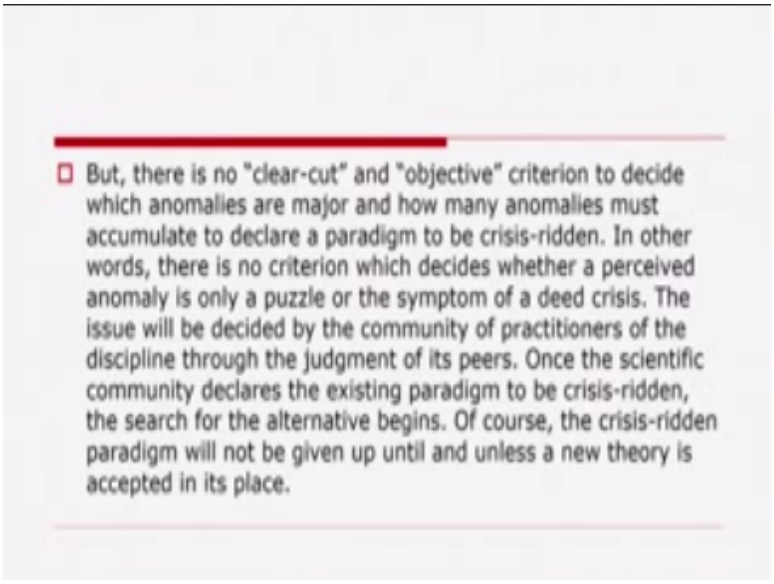

But there is no clear cut objective criterion Kuhn decide which anomalies are major or which anomalies are minor and how many anomalies must be accumulate okay to declare paradigm to be crisis through in other words there is no criteria and there is no criterion there is no indicator there is no yard stick which decided which determines whether a persuade anomalies or the symptoms of a deep crisis, we do not know the eso will be decided by the community of practice in our discipline.

Through the judgment of it is therein lies the popper I mean therein lies the beauty of Kuhn methodological schema so whereas the methods of science whether the existing paradigm is in crisis or not will come to know only through the concessions of scientific community the practice the particular discipline that will bring that is why the eso the controversy the debate okay that is why the eso will be decided by the community of practice inners of the discipline to the judgment of it is spheres.

Why is the scientific community declares the existing paradigm to crisis through the search for the alternative paradigms be gave of course the crisis ridden paradigm will not be given up until and unless and new theory is accepted in it is place I mean the crisis ridden paradigm will

continued to be the if we until and unless we find a new paradigm in it is place, and not simply we find up new paradigm but it also has to be accepted by the community or practice inners of the discipline through the judgment of it is spheres.

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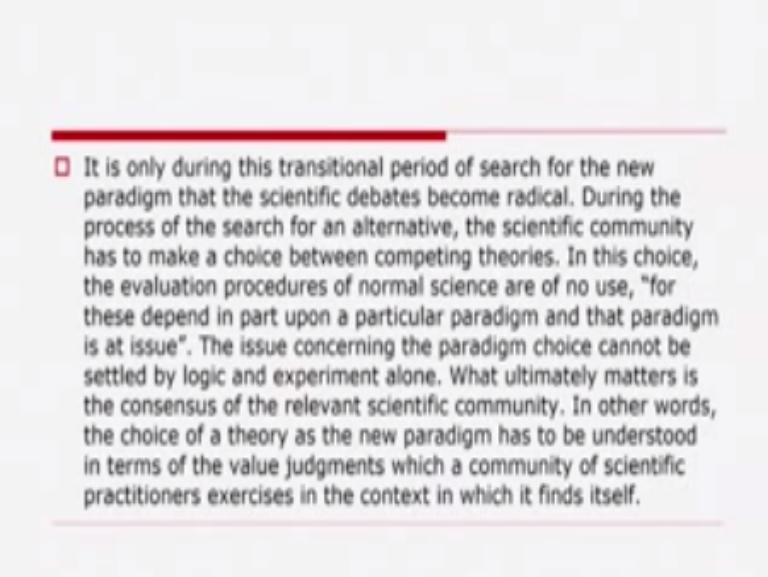

Okay it is only it is only during this transitional period of search for the new paradigm that the scientific debates become ready when within normal science you encounter anomalies and through these through the accumulation of major anomalies you come to know that know the existing paradigm is crisis okay then and when the search where the transitional period of research for the new paradigm comes up then we encounter the kind then we encounter the radical scientific debates, okay not the non bond scientific debates but rather transition scattering scientific debates.

And during the process of the search for an alternative the scientific community must make a choice between competing theories.

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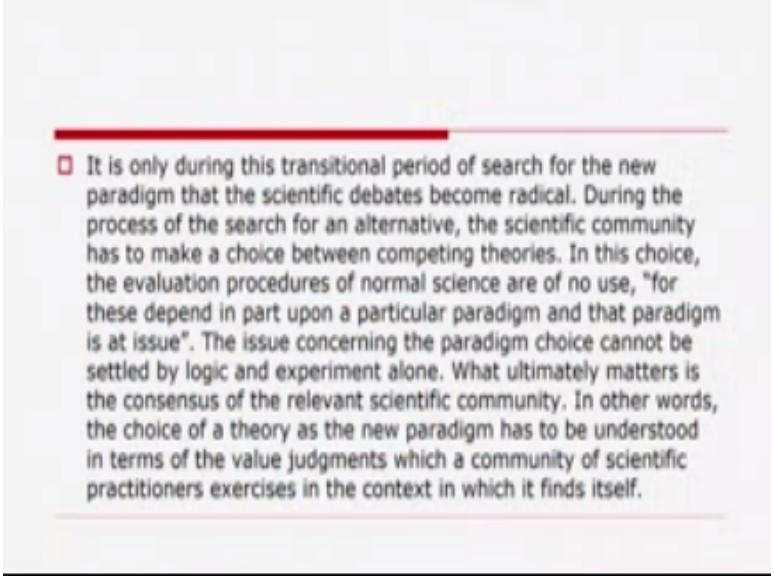

In which choice the evaluation procedures of normal science are of no use, for these depend in part up on a particular paradigm and that paradigm is at issue. The issue concerning the paradigm choice cannot be settled by logical and experimental alone, okay because of the complexity of the research problem. The issue concerning the paradigm choice the issue concerning the selection of for particular paradigm cannot be settled by logical and experiment alone what ultimately matters is the consensus of the relevant scientific community.

In other words, the selection of a theory the choice of a theory as the new paradigm has to be understood in terms of the value judgments which a community of scientific practitioners exercises in the context in which it finds itself. why, Kuhn said no the issue concerning the choice of a paradigm cannot be settled by logical and experiment alone, logic when I say it means scientific logic, logic in scientific discovery, experiment means I mean it is a method I mean these two are that is why from the very beginning we discussed the way the methods which science deployed okay.

There must be empirically confirmed and logically consistent statements of regularities, in this scene the issue concerning the selection of a particular paradigm model cannot be settled by logic and experiment alone. Suppose let me give you an example, whether India should go hide with nuclear tests or not does it happen only on the basis of logic in scientific discovery and experiments in sciences, no.

Whether Indian should go hide with nuclear tests or not is it simply a scientific question or a political question, whether India should go hide with nuclear tests it is based on some scientific advises or is it based on the concerns that was forced between the scientific and political elides of the country this is where value judgments come up. But as we have seen during while discussing positivism in science there must be a dichotomy between fact and value.

Facts are value neutral whereas values do not have factual contained, but in this case I mean the kind of scientific policies, the kind of scientific judgments that we make, the kind of scientific decisions that we make okay, they have become a part of I mean the way this such paradigms have emerged, they must be such emerges of such paradigms must be understood okay, in terms of the value judgments which are community of scientific practitioners, exercises in the context in which it finds itself.

That is why the context is very important, okay that is why it may not be determined through only logic and experiment. Why choosing while choosing a particular theory for the status of a new paradigm okay, the scientific community might advance arguments that sit to show that the chosen theory solves important problems is simpler than the rest and so. Suppose let me tell you that while selecting a particular theory okay, for the status of a new paradigm because the new paradigm has to replace the older one, old one okay.

The scientific community might advance arguments that sit to show that the selected theory the chosen theory solves important problems and it is also simpler than the rest and so, but these are all value judgments since there is no objective criterion to decide which problem is important, which problem is not important, which problem is significant, which problem is not significant what is simple, what kind of method that is simple, what kind of method that is complex, okay and so on.

In other words, that theory is chosen which fits the value commitments of a scientific commitment, then it is not fact based, it is value based. Now the transition has taken place from fact to a value judgment on the basis of condensers among the practitioners of the scientific community. Hence the question of choice becomes the question of value okay, as we have discussed no observation is pre-supposition less why, because any observation that we make okay, must involve some amount of selection on the basis of what selection is based, what is basis of selection.

The selection is based on cultural relevance as Weber said, if selection is based on cultural relevance then the question of choice or selection becomes the question of value, I mean it may not be a fact and Kuhn points out that the question of the value can be answered.

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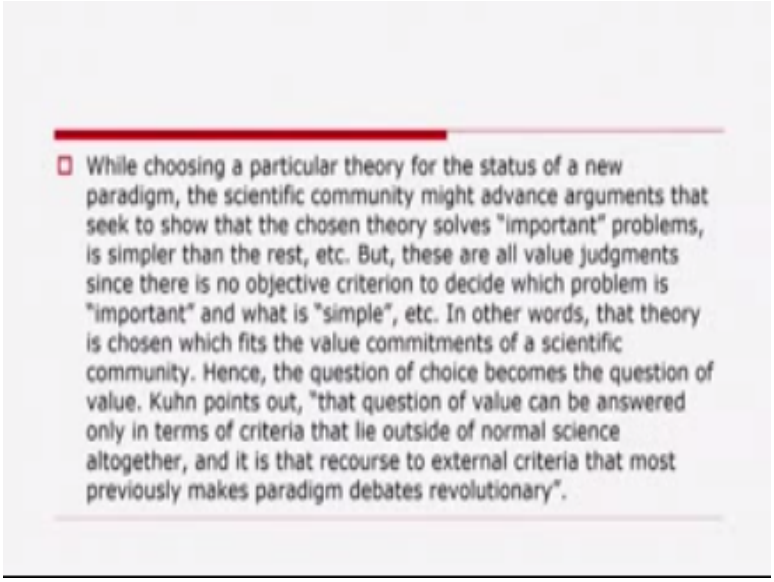

Only in terms of criteria that lie outside the preview of normal science all together and it is that recourse to external criteria that most previously makes paradigm debates revolutionary, okay. Now the question that the question of selection the question of cultural relevance, the question of value that we talk about in the context of Kuhn methodology of science okay, then it is not based on certain fact. It is also not based on value in simplistic scene, but a value the way it has been organized, the way it has been interpreted by the practitioners of a particular discipline I mean the scientific community in this science.

Thus, the selection of a paradigm cannot be explicated in a natural language of mathematical and experimental procedures but in term of specific perceptions which a scientific community either social entity intendance what it considers to be the basic value of its professional expertise in other words the ultimate explanation of a theory choice the ultimate explanation of the selection of theory is jot methodological but sociological.

According to go hence in Kuhn's scheme the idea of scientific community as a social entity is axiomatic that is why whenever we make some kind of selection okay of parading is sciences

even in sciences okay it may not be based on fact it mostly it is based on value as it has been envious by Kuhn methodological account of science in the context of the consciences which is forced by the practisonors of that particular discipline while making the judgment by the it is also determined the selection of a new parading is also determined in terms of the pure group that is why these days you find many journalist they have pure review system okay.

And for Kuhn it is not simply I mean selection of as new theoretical parading it is not simply methodological but sociological, okay perhaps for this region Kuhn's idea of scientific community as a social entity is axiomatic.

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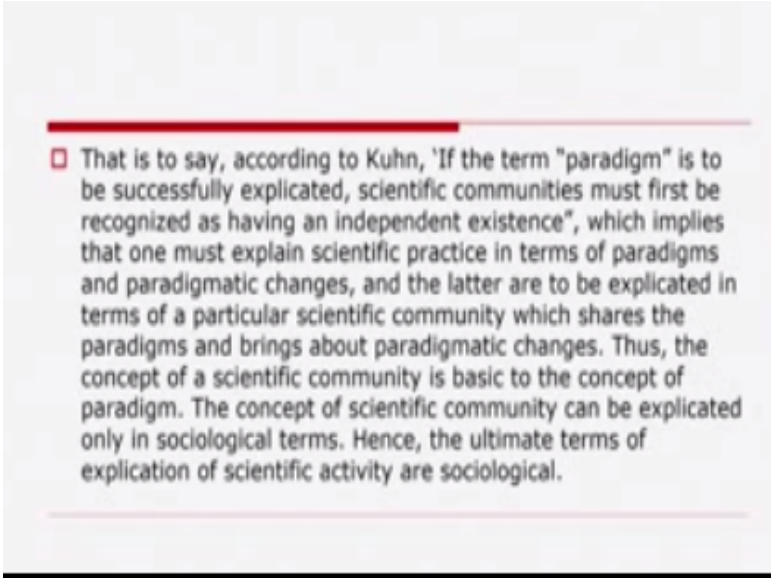

That is to say if the term parading is to be successfully explicated scientific communities much first be recognized as having and independent existence which implies that one must explains scientific practice in terms of parading and paradigmatic changes and the latter are to be

explicated in terms of our particular scientific community which shares the paradigms and brings about paradigmatic changes at the changes in terms of model.

Thus the concept of a scientific community is basic to the concept of parading the concept of scientific community can be explicated only in sociological terms according to Thomas Kuhn hence the ultimate terms of explication of scientific activity are not methodological but sociological.

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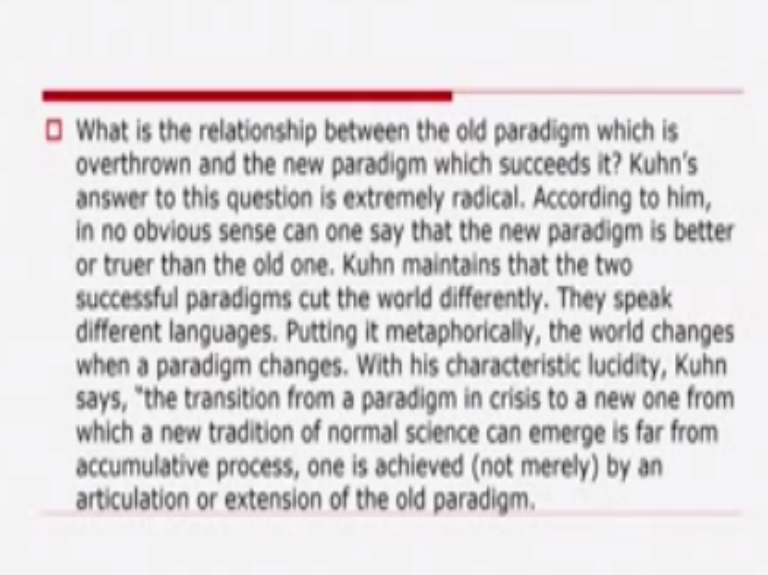

Then what is the relationship between the old parading which has been overthrown and the new parading which has been excepted what is the relationship between the old parading and then new parading and Kuhn's answered to this question is extremely radical according to Kuhn in no obvious sense can one say that the new parading is better or truer than the old one, Kuhn maintains that the two successful paradigm's cut the world differently they speak different languages they use different idioms okay.

Putting it metaphorically the world changes when parading changes the world changes when the parading changes our view of about astronomic changed when we saw the transition from

autonomies version to popper Nikon revolution and subsequently Galileo's inventions. That is why our world views our perspective also changes in a parading makes change, with Kuhn characteristic assiduity he says I mean.

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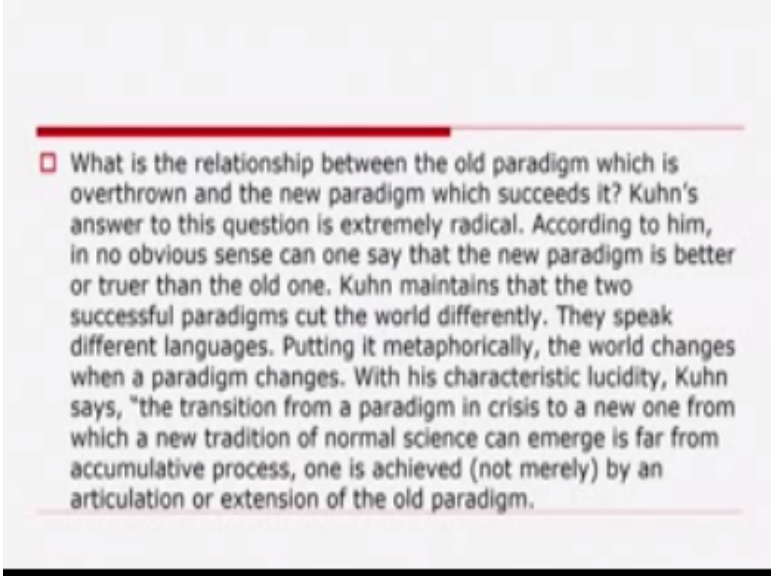

Or the transition from the parading inscribes to a new one from which a new tradition of normal science can emerge is fat from a accumulative process, one is achieved not nearly by an articulations or extension of the old parading.

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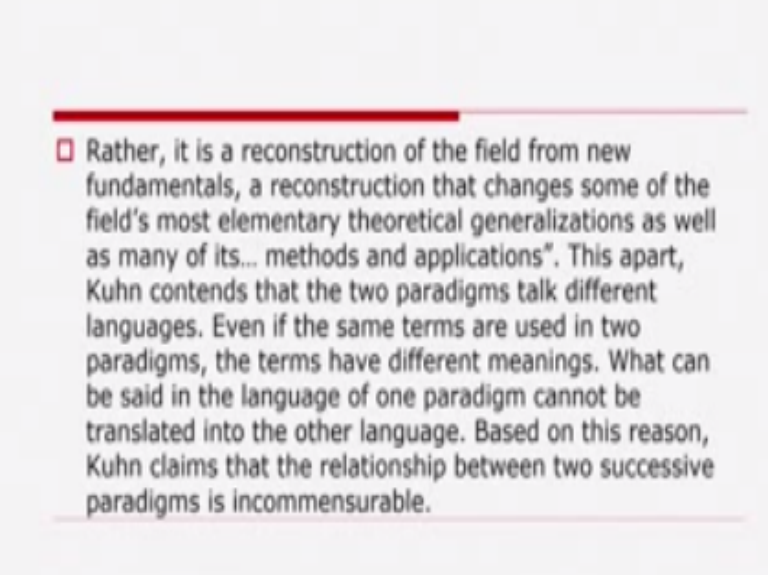

Rather it is a reconstruction of the field from new fundamentals a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its methods and applications. This apart Kuhn contends that the two paradigms talk different languages idioms, even if the same terms are used in two paradigms the terms have different meanings what can be said in the language of one paradigm cannot be translated in to the other language based on this reason Kuhn claims that the relationship between eh two successive paradigms is incommensurable.

There is something called incommensurability thesis okay if I say secularism and communal region that in commensurable okay why? Because there opposed getting reach that is why the old paradigm okay and the new paradigm there in commensurable Ptolemy and copper Nikos might have used the same language same medium same concepts Newton and Einstein might have used the same language idioms concepts they might have been followed this same methods but essentially there incommensurable because they new paradigm it makes intellectualist and political departure a theoretical departure from the older one okay.

In this sense no wonder Kuhn compares paradigms shift to just ad switch with this idea the idea of scientific progress as a continuous and the idea of truth as the obstacles standard stand totally repudiated I mean with this the idea of scientific progress as a continuous process and the idea of truth is been obsolete standard stand totally repudiated.

Kuhn advances what might appear to be an undiluted relativism according to which truth is intra-paradigmatic and not inter-paradigmatic that is to say what is true is relative to a paradigm and there is no truth lying outside all paradigms okay.

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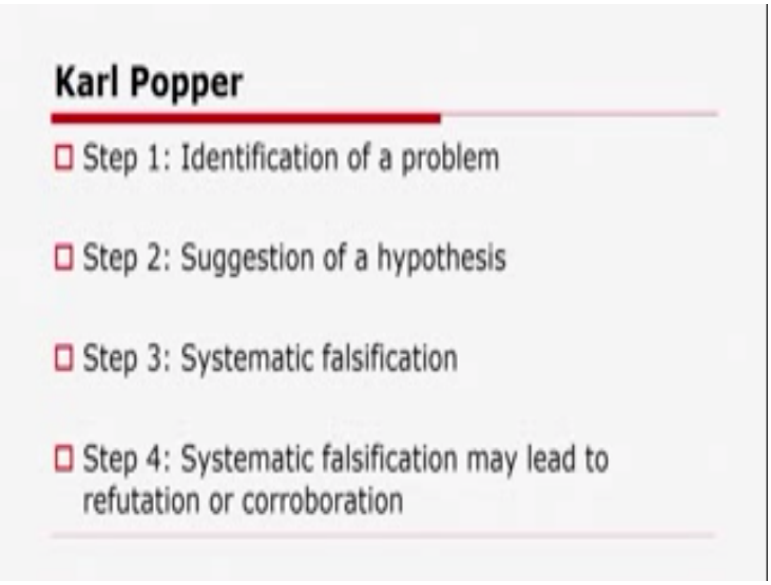

Then what we have what are we discussed till I mean in the methods of science what we have discussed.

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We have discussed inductivism hypothesism then projectivism then popper end Kuhn popper end Kuhn the constitute the most dominant methods in the history in the analysis of history of science okay perhaps intellectual emotion stimulating controversy have emerged from this two intellectuals okay.

In the context of popper the first step suggests I mean according to popper science must start with a problem it must suggest the hypothesis or in the form of tentative solutions to a problem or hunch which goes through the process of systematic falsification and such systematic falsification may lead to repudiate in a collaboration I mean if hypothesis is tested wrong then we must refuse this we must reject this hypothesis.

But if it is hypothesis is tested right then we must be able to collaborate it we should not accept it because under what limiting conditions particular hypothesis tested is right okay not all not under all limiting I mean not under all circumstances such hypothesis particular hypothesis is tested right.

That is the we must be able to collaborate it we must be able to keep our hypothesis permanently it these suggested that every science passes through two stages one the pre-paradigmatic stage and two the paradigmatic stage then what is the role of science I mean in the pre-paradigmatic stage what we see that there is divergence thinking.

You will find more than one more practicing that particular science you will in the case of astronomy physics chemistry and biology and when there is a concept of convergent thinking

when that there is a scope of convergent thinking then science becomes mature science enters the paradigmatic stage from the pre-paradigmatic stage.

When science makes a leads from pre-paradigmatic stage to paradigmatic stage science becomes mature okay within that is why if I say there is a transition from pre-paradigmatic stage to paradigmatic stage I mean there is a transition from divergent thinking to convergent thinking there is a transition from plurality of practices to the uniformity of practice.

And astronomy was the fast discipline which entered the paradigmatic stage in by a building such concerned but having that convergent thinking followed by physics chemistry and biology but according to Kuhn in certain areas in creative areas like art, literature, music, philosophy and even medicine okay.

It is extremely impossible I mean it is absolutely impossible to make such transition from pre-paradigmatic stage to paradigmatic stage because of the nature of the problems that in the paradigmatic stage we encounter I mean we try to emphasize more on sciences which are guided by certain norms rules regulations of the existing paradigm.

That is why it is called normal science not bound science and when normal science fails to address the problems of unexpected happenings which Kuhn suggested that to when normal science is encountered by certain anomalies I mean unanticipated or unexpected occurrences okay.

Then that normal scientific transition gets I mean becomes enormity and the situation of fraises always forces us to search for a new paradigm okay and that new paradigm is achieved okay by rejective the existing paradigm by looping at the revolutionary science or scientific revolution which is traditions certainly that is why what Kuhn suggested that if normal science is the tradition bound activity then revolutionary science is a tradition settled activity okay.

This is very important not from this we are not going to directly jump to firmness okay will fast tried to understand the compares between popper and Kuhn we have compared we have discussed in the previous hypothesis projectivism popper and Kuhn and then it is important make a comaprigent between popper and Kuhn and then will move on to Paul firmness against method outline of an fanatics okay will see some of the radical implication of Kuhn position can be brought about by juxtaposing his views with those of Popper.

The hallmark of science according to popper is critical thinking that we have already discussed. In fact exemplifies critical thinking at it is best. If you look at critical thinking you can go back to what decade said I mean cut easing philosophy of science suggest that in think I doubt, that is why fo9r popper in fact science exemplifies critical thinking at it is best.

Since critical thinking considers nothing to be settled and lying beyond all doubt, fundamental disagreements and diversion thinking must add an impact to get characterizer. We have discussed Kuhn version of the shift from pre paramedic stage to paramedic stage, that shifts from pre paramedic stage to paramedic stage suggests the shift from plurality of practices to the uniformity of practice.

I mean the shift also indicates the shift from diverging thinking to converging thinking but for pooper since critical thinking nothing to be considered settled and lying beyond all the doubt fundamental disagreements, no conversions, fundamental disagreements and must indeed do characterize. As we have seen according to Kuhn, what constitutes the essence of scientific practice is normal science, norm bound science. Science is guided by certain rules, regulations and so on. And we have also seen why normal science.

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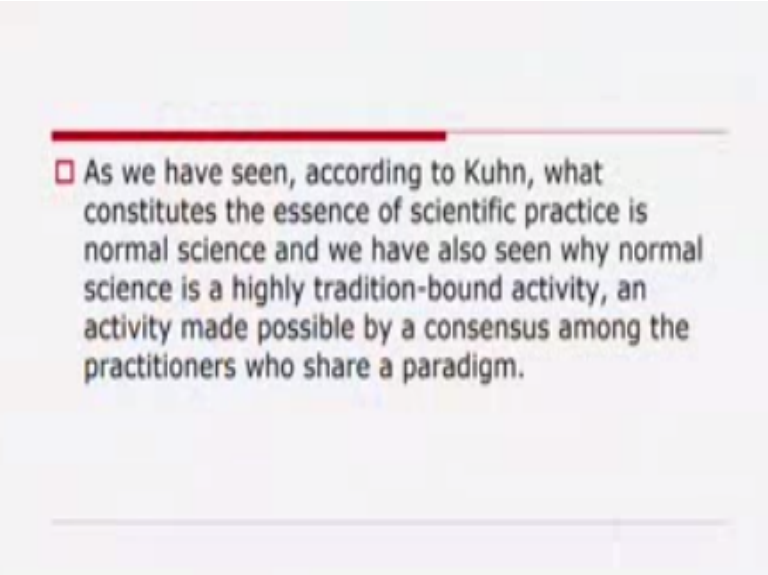

Is a highly tradition bound activity, a puzzle solving activity, an activity made possible by a consensus among the practitioners who share a particular paradigm.

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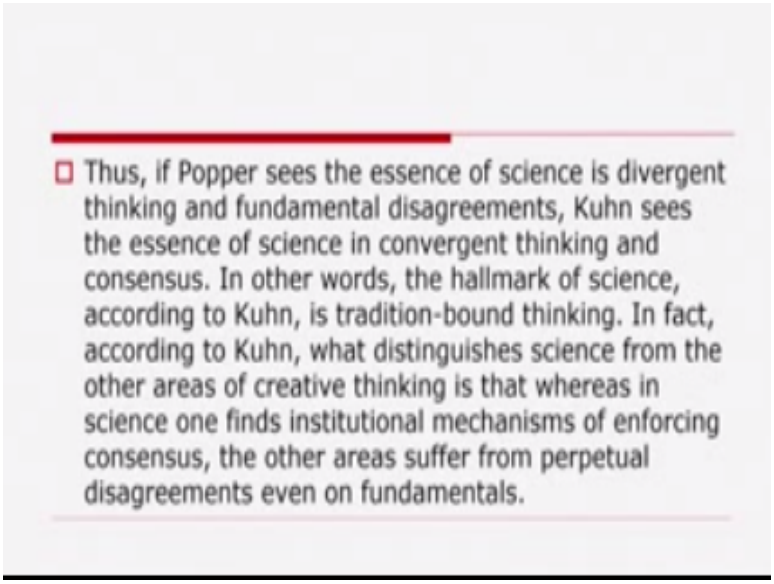

Thus if pooper sees the essence of science is divergent thinking and fundamental disagreements, Kuhn sees the essence of science in convergent thinking and consensus. To put it differently the hall mark of science according to Kuhn is tradition bound thinking, in fact according to Kuhn what distinguish science from the other areas of creative thinking is that, where as in science one finds institutional mechanism of enforcing consensus, the other areas suffer from perpetual disagreements even on fundamentals.

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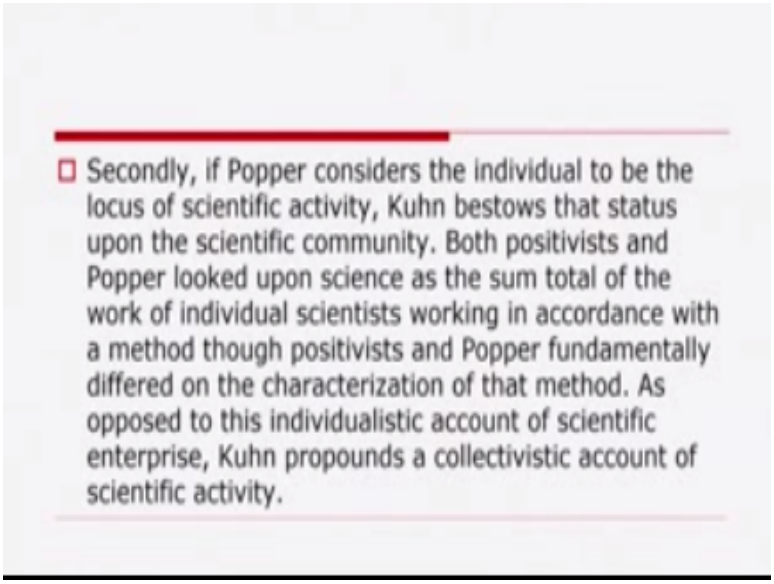

Secondly the pooper considers the individual to be the locus of scientific activity; Kuhn bestows that status upon the scientific community. If pooper considers the individual to be the locus of scientific activity; Kuhn bestows that status upon the collective on the scientific community. Both positivists as well as pooper looked up on science as the sum total of the work of individual scientist working in the accordance with a method. This is important though positivists and pooper also fundamentally differed on the characterization of that particular method.

What is that method? I mean positivists they always looked at that method; I mean starting point must be observation, where as for pooper it is always the identification of the problem okay, observation is theory for pooper for positivists, observer theory independent. As opposed to this individualistic account of scientific enterprise Kuhn propounds a collectivistic account of scientific activity okay. In Kuhn scheme it is the scientific community.

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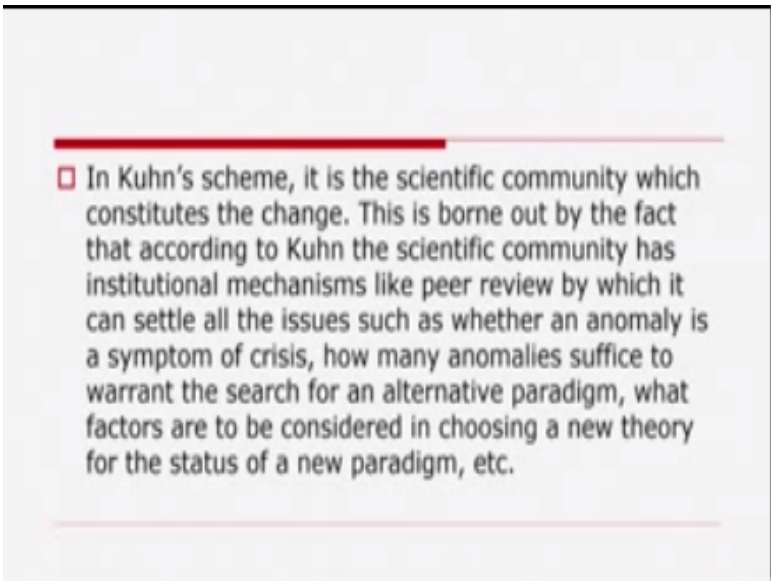

Which constitutes the change, this is borne out by the fact that according to the Kuhn the scientific community has institutional mechanism like peer review by which it can settle all the issues such as whether an anomaly is a symptom of crisis, or nearly it is exceptional or how many anomaly suffice to warrant the search for the alternative paradigm, what do we mean by anomaly? Or minor ones what factors have to be considering in choosing the new story for the status of new paradigm so on.

Thirdly pooper and Kuhn define fundamentally in the attitude towards transition from one theory to another in science. According to pooper we can explain very case of theory change in terms of certain norms which signs always adopt and follow. In fact scientific rationality consist in following these norms but Kuhn contains that an adequate explanation of theory change must be in terms of value judgments made by a community, while maki8ng the choice.

According to Kuhn recollects to the so cold methodological norms explains nothing. I mean when pooper was absolutely confident about the methodological rational of science, Kuhn moved beyond the methodological rational to value commitments, to value judgments in sociological terms. From the point of view, of pooper okay Kuhn is an irrationlist because he set

aside the methodological norms and sets to explain theory change exclusively in terms of non rational or sociological factors or value commitment.

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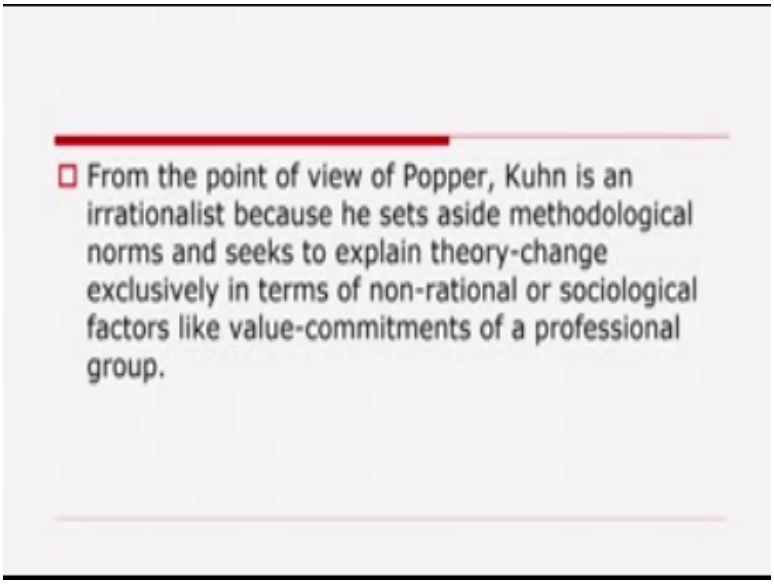

Professional group or ideological commitments of a professional group okay by the way what is an ideology I mean theoretically speaking ideologies are meets ideologies are fanatic's ideologies are inverted images ideologies are material like these characterization of ideologies very important while discussing science because if science has to be objective then it also has to be divide of any kind of ideologies okay in proper but in Kulim schema I mean for popular science cannot have value judgments value commitments it has it must employee strong methods.

Okay it cannot be ideologically oriented that's why I said what are ideology are needs ideologies are fanatic ideologies are inverted images ideologies are echoes of material live in question of truth in request of knowledge one must his or her ideologies I mean I truth in request of knowledge one must go beyond his or her ideology okay in this sense what we are trying to do that what popper try to do the popper try to provide a strong methodical rational or strong methodical explanation within the power of science what one suggests that vary often scientific decisions are made not simply on the bases of logical experiments but on the bases of value judgments of the practitioners of the particular despite through okay whatever be the merit of.

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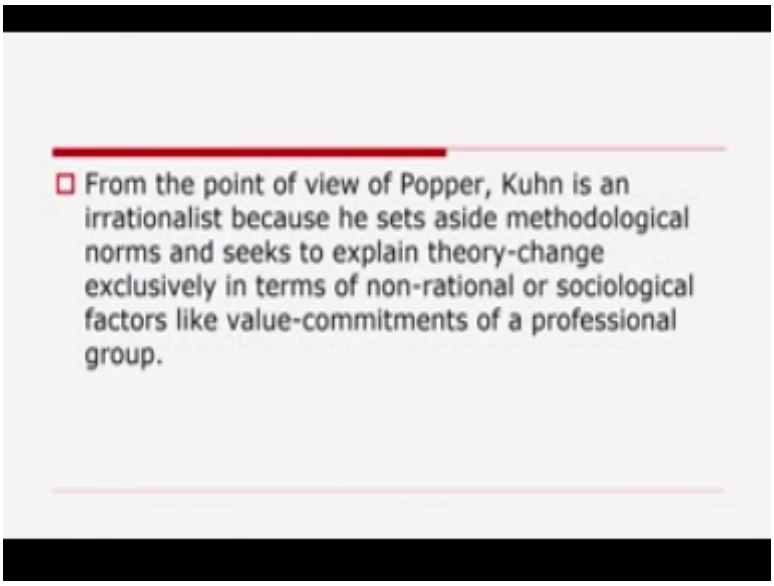

But such sociological recount of theory change was attack by popper he said Kuhn is an irrationalize because he sets aside methological norms and seeks to explain theory change exclusively in terms of non rational or sociological factors like value commitments of a professional group.

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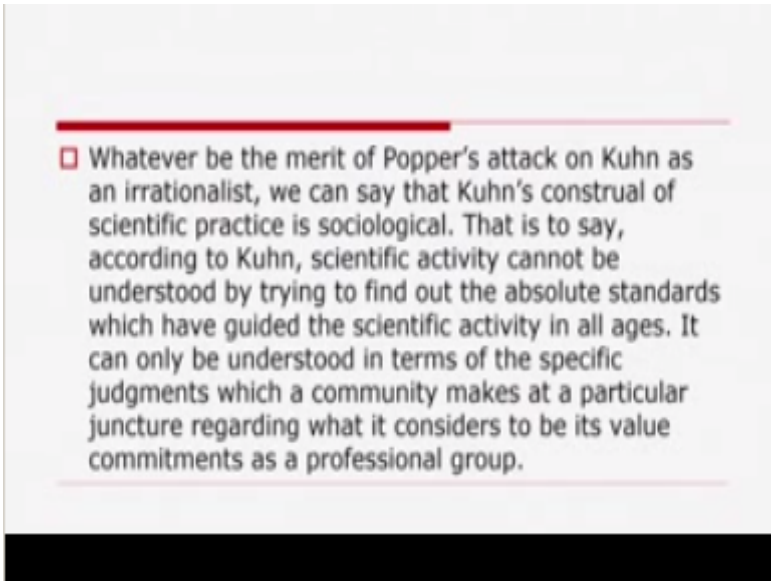

Whatever be the merit of poppers attack on Kuhn as an irrationalist we can say that okay we can say that poppers attack on Kuhn I mean we can say that Kuhn construal of scientific practice is sociological that is to say according to Kuhn scientific activity cannot be understood by trying to find out the absolute standards which have guided the scientific activity in all ages it can only be understood in terms of the specific judgments which a community makes a particular juncture regarding what it consider to be its value commitments as a professional group.

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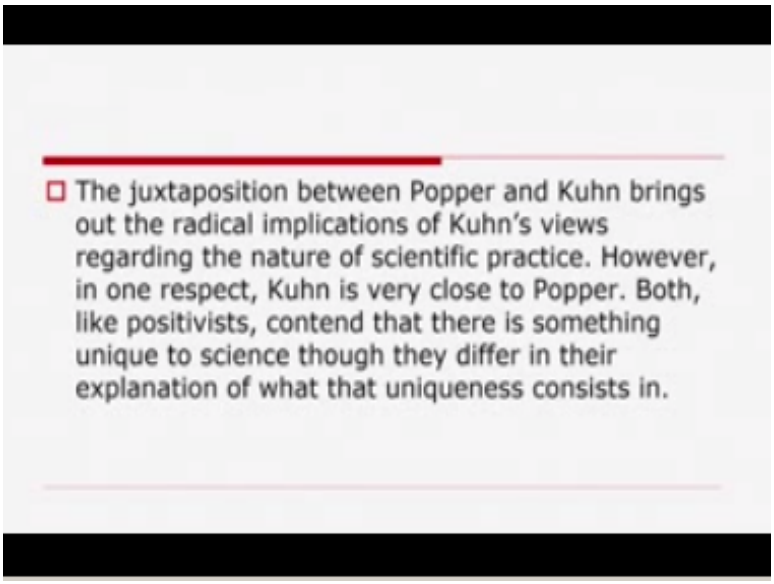

The juxtaposition between popper and Kuhn brings out the radical implications of Kuhn's views regarding the nature of science practice however in one respect Kuhn is very close to popper both like positivists contend that there is something unique to science though they differ in their explanation of what that uniqueness consists in.

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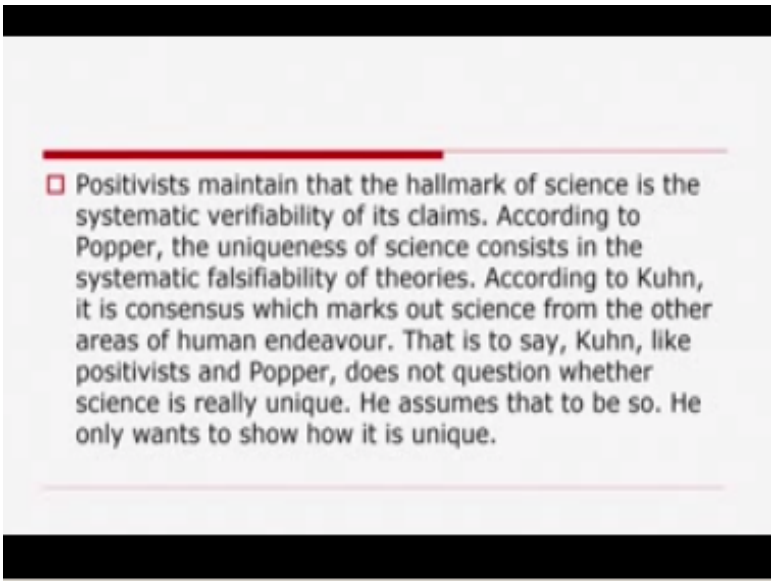

Positivists maintain that the hallmark of science is the systematic verifiability of its claims according to popper the uniqueness of science consists in the systematic falsifiability of theories according to Kuhn it is consensus which marks out science from the other areas of human Endeavour.

I mean when positivists is suggested that the science must start with observation okay the hallmark of science lies in the fact that all scientific statements must be systematically verifiable popper said that it is not systematic verifiability rather it is systematic falsifiability how science is unique how is science supreme how is we must demand science and non science the uniqueness of science according to popper consist in the systematic falsifiability of theories for Kuhn it is consist which marks out science from the other areas of human India that is to say Kuhn like positivists and popper does not question science is really unique Kuhn assumes that to be so Kuhn only wants to show how it is unique.

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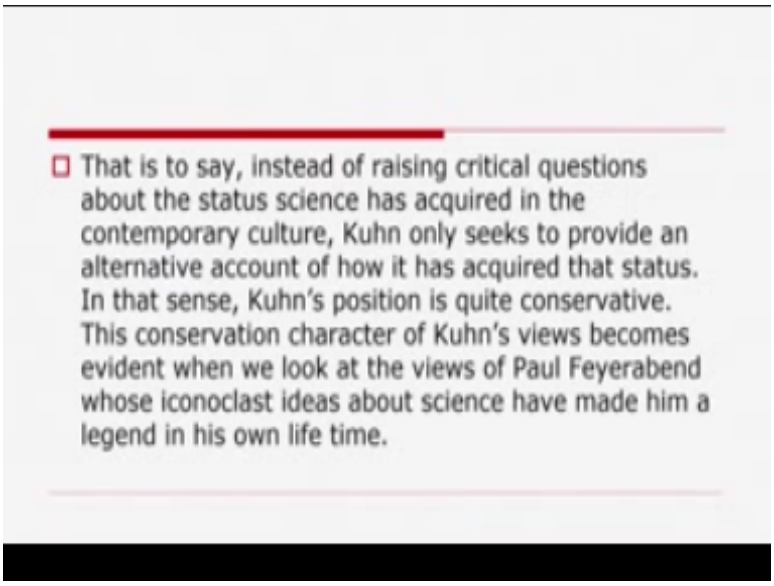

Okay that is to say instead of raising critical questions about the status of science about the status science has the acquired in the contemporary culture Kuhn only seeks to provide an alternative account of how it has acquired that status in that sense Kuhn position is quite conservative okay and this conservative character okay of Kuhn's view becomes event when we look at the views of Paul forbid whose ideals about science have made him a lesson in his own life time I mean far bins against method outline of an architect mythology or an architect outline of an theory of on which year on 1975.

Okay now let us till now what we have done we have tried to deal in methods of science in terms of intuitivism hypothesis logical the methods profounder by two philosophers of science namely Thomson cook now we will go ahead call paraphin whose views about the very idea of scientific method require greater attention I mean the way for bind reputed the very idea of scientific method not simply on the basics of value judgment I mean not simply on the basics of wings but on the basis of logical history okay we see it now.

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