INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

NPTEL

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Ecology and Society

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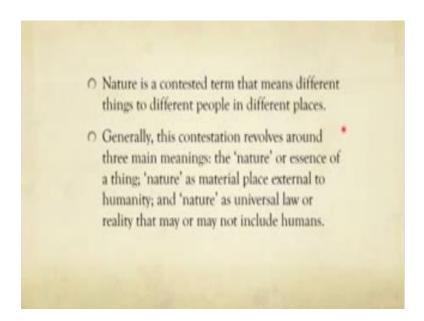
In the last class we had discussed the difference between nature and culture and we try to maximum of how the duality of the dichotomy which exists between nature and culture by citing the examples of the friends anthropologists Levi-Strauss and in that he tries to give more of biological explanations of nature and culture by trying to demarcate between the truth and trying to espouse a gender differences of between men and women and try to relate that with nature and culture now moving on we will try to look at nature why nature as a subject is upon tested concept and wise nature.

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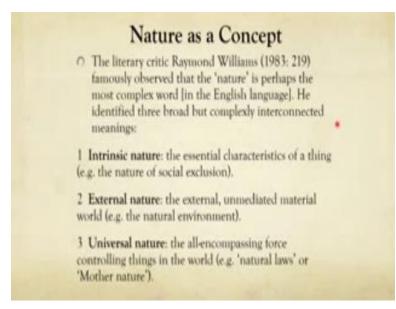


Perceived or explained by different people or across disciplines in a different way and more or less will try to look at how the different friends which are being taken into account like for instance the prime modulus and the constructive is how the maxims of nature and how nature is being imagined and also we will try to rely on the works of do not lack to and Benedict and this one and how they tries to explained and how they conceptualize this very term called nature and also I will try to engage in two look at the it dialectics of what nature is as I said a while is the particular term needs a contest account and then why does it means different things.

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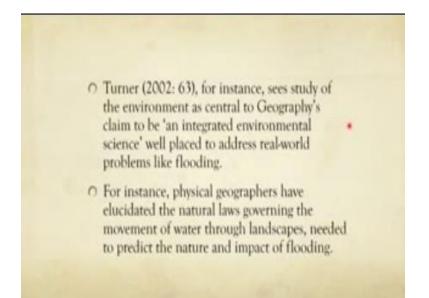
To different people across different cultures and generations and normally these conversation in a way we both around any three important ways of understanding and the first thing is nature or the essence of the things and the second is nature as a material place external to humanity that is the nature in itself and nature as a universal law or reality that may or may not include humans so most often times even in this universal law people tend to avoid of including humans in the in relationship with nature. (Refer Slide Time: 03:37)



Now if you look at the works of the literary critic Raymond Williams he tends to sort of observe that nature is perhaps one of the most complex word and in order to formulate or support his argument he tries to give us an explanation how this complexity is interconnected and the meanings which we attribute to nature, now the first thing intrinsic nature that is the essential characteristic of a thing that is neither in exclusion of the social order Society of humans and second is the external nature.

That is the unmediated materials rule that is the natural inversion and thirdly it is the universal nature that innocence and calm pulse all games and of course human is also part of that and for instance nature is seem to be synonymous with mother which in essence is again seen to be engaged in nurturing and caring, now mother our modern age these are some of the sort of jargon or terminologies which are being commonly and generally used.

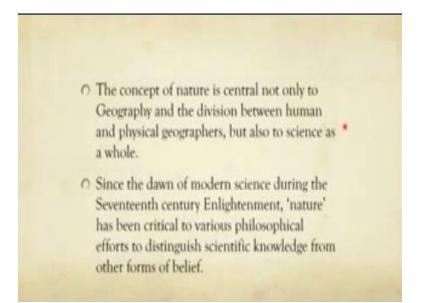
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Now Turner for instance well tends to put it that environment happens to be sort of the primary or central to the developers or the disciplines of the geography's and which in essence is an integrated environmental science which is in a sense place to address the real-world problems that is the physicality for instance like flooding it can be not quick it can be a tsunami and so and so forth, now for instance to the physical geographers they have innocence elucidated these natural laws governing the movement of water through landscape.

And also the attempts to and get in predicting nature and the impact of certain calamities like flooding and other now these are perhaps some of the engagement where the physical geographers are normally into, now if you look at this concept of nature which is of course central not only to geography defend from what the giraffe first innocence claim because this concept of nature for long has been beginning from the period of these the Enlightenment and also way back in the 17th century and even in modern science there has been an attempt across disciplines and by philosophers in order to distinguish the scientific knowledge from.

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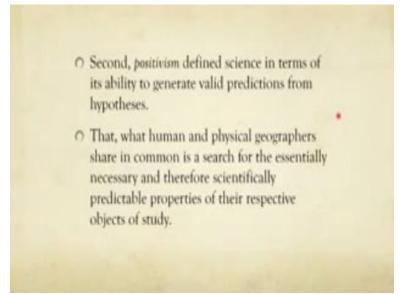
Other forms of knowledge belief that is the very concept of nature the meaning which is being attributed the kind of perceptions how it is being interpreted and how one makes sense to nature is in a sense a part of a discourse beginning from that period now and it is still pretty much an ongoing and in the modern context the anthropological scientists, like Bruno Latour also give a modernist version of how this nature is to be seen and interpreted I will come to that in the short wild now first why is that science often being distinguished from this sort of the belief the kind of cosmology.

Which we humans have engaged over a period of time now science to some extent attempts to engage in bringing an end share through a different kind of tools and methods, now science generally distinguished from this distance from this religious explanation because it tends to see that by this whole idea of this knowledge about nature of things has to be sinned in a more objective manner in the sense that it is not based on subjective belief. First, science has often been distinguished from religious superstitions on the grounds that its knowledge about the nature of things is objective - in the sense that it is not based on subjective belief but on direct, impersonal and, in that sense, objective observation of an external and independent reality

But it is more on a direct or if not an objective observation which is impersonal and which is in a sense external and dependent reality, now in that sense there is a sort of a boundary which is being drawn between times and religions there are two separate entities and in that context how are we trying to contextualize the debate on this nature or the concept of nature, in this debate now because in science the small as we have seen the small scope for this in the accommodation of the subjective belief.

Where as relevant is more of a subjective in nature because it attempts to look at the kind of sentiments emotions which in essence guided the people who practice any forms of religion for that matter.

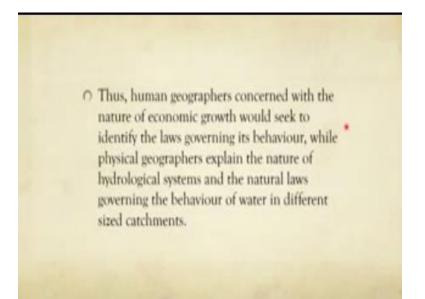
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Now second positivism also tends to define science in terms of its ability to generate some kind of event predictions based on a certain kind of hypothesis, now normally a scientist before validating or an engaging in an empirical study they hypothesize and then test the hypothesis as to what extent that hypothesis is valid or how it is being proved now in that going by that what human and this physical developers share in common is innocent and giving for an essentials necessary and scientifically predictable properties.

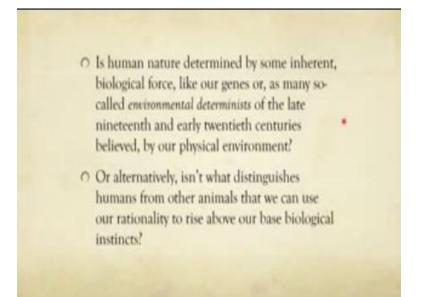
Of the respective objectives of the study objects of the study, now if we apply this science and for that matter positivism in trying to understand a maxim of nature what perhaps could be the way out, now as we said that for quite some time the workers or the discipline of the graphically.

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In said environment is sort of subject to them now human the well first innocents are concerned with the nature of economic growth and, if they looked at this perspective of this economic group they would try to seek and identify the laws governing its behavior now in that the physical developers will try to explain the nature of these biologic hydrological system and the natural laws governing the behavior of water in different sized captions, now similarly how are we trying to bring in the anthropologist who will try to sort of understand this nature or maybe sit say the nature of production .

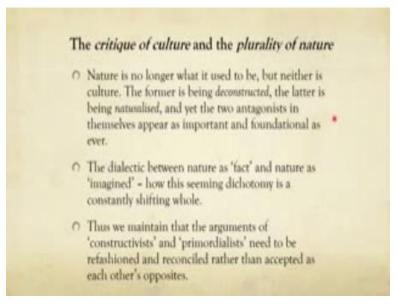
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And then how are we trying to engage looking at the dialectics of this nature in function, now the question is human nature determined by some inherent biological force like a genes or as many so called environmental determinants which we have of course already discussed in the earlier lectures how environmental determinism in essence is influencing the human society and the late nineteen and are allocated century believed by our physical environment now or is there any other alternative way out of what distinguishes.

Human from other animals that we can innocence and give in using our rationality to rise above our base biological instincts, now the idea is to move out of these sort of biological instincts or forces in explaining the relations of human in nature, now let us look at some of the critic of culture and the plurality of nature.

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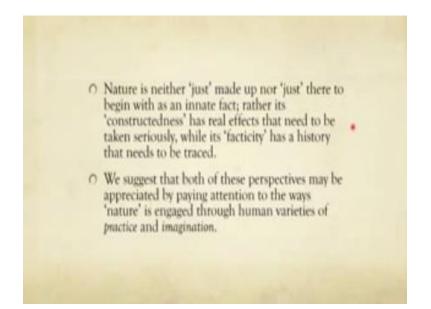


Now nature in essence also evolves and, so is culture this is the general perception or may be in other words naturally seem to be something which is perceived to be static but nature is no longer what it used to be and nature is seem to be being deconstructed and the later is being sort of naturalized, and yet there is still a continuation of this interbreeding which exists between the two and therefore this dialectics between nature which is a fact and nature as imagined has two brought in the kind of shifting dichotomy between business and culture.

Is does we have to maintain some kind of an argument of looking at the constructivist and the primal is how they tries to engage in reasoning and reconciling, rather than accepting each other is opposites because they are trying to, sort of find an agreement a way out of and gazing into this now the prime modulus are more or less looking at the very first form of what nature is how humans are related with it and most of the entropic is are innocent taking the stance of this prime model list.

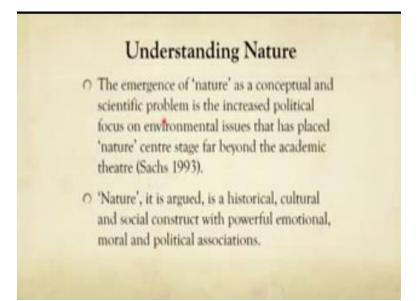
Whereas constructivist innocence and gives In looking at how nature in essence is evolving and it has to be deconstructed so this is the stance certain scholars are also taking side with.

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Now nature innocence is not something which is this made up or not just there to begin with as a effect rather the contractedness of this particular the contractedness has real effect that needs to be sort of understood in its fact that is the fact P which has a history that needs to be traced, so one is to engage in looking at the sort of the phrenology or the history of that fact, now perhaps these two can in a way bring in a different forms of perspective by paying attention to the ways in which this nature is engaged through human varieties of practice and image.

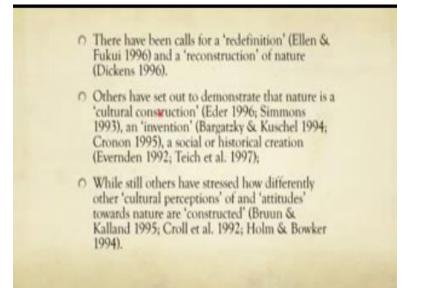
Now what is practice and imagination practice no doubt is more empirical and imagination is more of a construction which we humans are normally engaged in, now what is this imagination and how do we employ that in trying to maximum of nature. (Refer Slide Time: 17:47)



That is an understanding nature now this the emergence of nature in essence as a conceptual scientific problem tends to bring in a more and giving question of because of the political focus on these environmental issues, which has of course bend place a much more important positions in the academic discourse, now nature in essence is also being argued as historical cultural and social construct with embedded with a certain emotional moral and certain kind of political consciousness.

Now one also needs to sort of understand the political ecology is not the politics of nature and there by establishing a historical and cultural and also the social historic city of what nature is.

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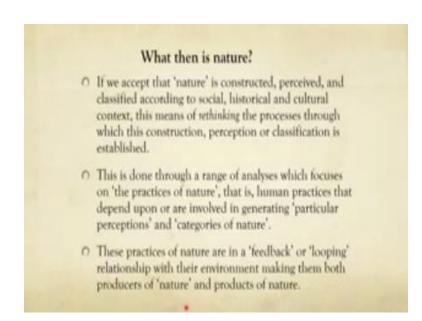


Now then propel is like Rhode Island and Fukui innocence has draws our attentions in redefinitions or redefining what nature and also there construction of nature which is a espoused by deacon where other schools of thought also talks about, how to engage in the cultural construction of nature that is by either an assignment and also the invention of nature and also to look at the social or historical create a gradient of what net nature the nature is by different scholars also others have still stress on a different way out.

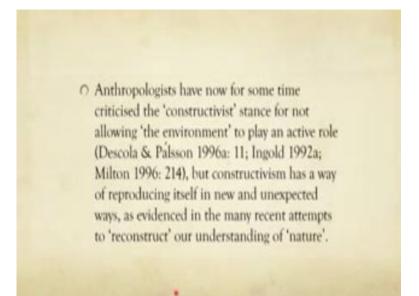
That is the cultural perception of and attitudes towards nature is which are being constructed remember, I will try to look in the two different way that is the primal deletes and the constructivist what then is nature, if we are to generally accept nature is something which is being constructed perceive and classified according to the historical social cultural, and political context this would in essence require a kind of redefining or rethinking because through this rethinking processes of course.

There will be construction perceptions and also classifications of nature now how, how would we engage in doing this could perhaps be done through range of analysis which in essence focuses on the practices of nature there is the human practices that depend upon or are involved in generating a particular perceptions and categories of nature and this practices of nature are innocent a feedback or a loop in relationship with the environment making them both sort of producers of nature is and the products of nature remember these two definitions of what.

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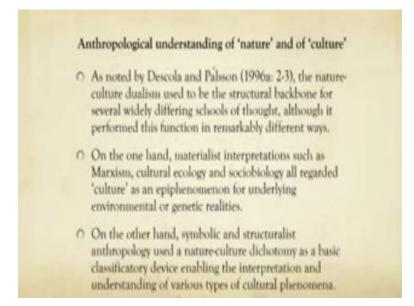


Producers of nature is and the products of nature the way we tend to perceive and contextualize or share a relationship with nature can be innocent located in these two parameters that is the producers of nature is and the products of nature,. (Refer Slide Time: 22:07)



Now anthropologist for quite some time has in a way criticized with the constructivist and because they do not really allow the environment to play an active role which means letting the environment by itself giving a free hand but the form and according, to this the constructivist or constructivism also met their positions clear by saying that they have a way of reproducing itself in a new and unexpected way that is evident in many recent attempts to re constructor our understanding of nature.

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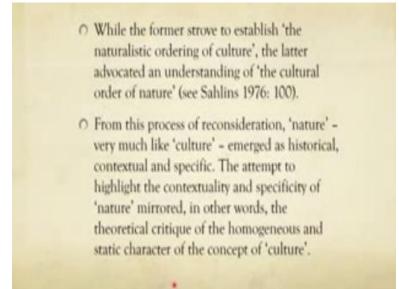


Now first and foremost the anthropological understanding of nature and the culture which were being posited by scholars, like this persons what they see is the dualistic nature between nature and nature and culture perhaps was the starting point for different school of thought and although it is performed this, functions in a different way on the one hand there is the school of thought which engages the metalist interpretations such as Marxism in cultural ecology and sociobiology and how they try to you know our maximum or regarded base culture.

As an environmental if not a materialistic or physical reality on the other hand there are some school of thought which belong to the symbolic and structuralist, and properly which use nature cultured ichotomy as a basic philosophically device which in essence enables them to interpret and understand the various types of this cultural phenomena and then cultural phenomena not outside environment but in relationship in environment , now giving this sort of breaking them up their defense school of thoughts.

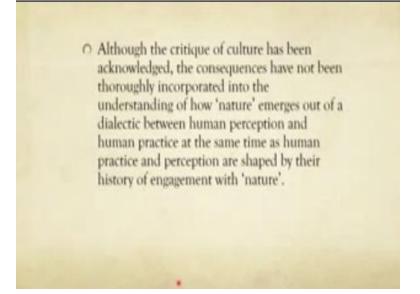
Even within anthropology and also others like the Marxist school of thought which tends to you know maxims of nature.

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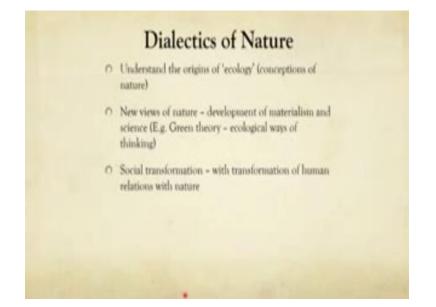
Now the form of strong school of thought innocence strive to you know establish a natural ordering of culture, whereas the later advocate and understanding of the cultural order of nature the natural and, the cultural these two defenses is being posited by Marshall Sahlins and from this process of reconsidering nature very much like culture there emerges a historical contextual and specific and therefore the attempt has to be more in the context and specific of what nature is or in other words the theoretical critic of the homogeneous and Static character of the concept of this culture.

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Now although there is a critic of this culture which has been acknowledged the consequences have not been thoroughly innocent incorporated in understanding how, nature emerges out of dialectic between human perception and human practice that is the differences between practice and imagination at the same time as humans practice and perceptions are no doubt saved by the history of engagement with nature ,now the idea is what is the first form or the first instances of the human and gaze and gaze men with nature historical we will look into that now I try to give you an explanation.

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Slightly different from what we have looked into that is to look into the dialectics of nature that is in understanding the origins of ecology that is the conception and perception of nature now, there are any wheels of this nature as there is a development of this metal ISM and science for examples the green theory which talks about which in essence is looking at nature as something which is separate, if not the environment is to be seen in the image and giving in a more wild earnest thinking.

This perhaps is a new way of ecological thinking now there is an emulation of weaving at nature as well the way we perceive and the way we try to locate and understand nature and along alongside there is this a social transformation, which is taking place now what is the social transformation how there is a transformation of human relationship with nature the kind of relationship which is being established between human and nature, in terms of let us say the economic production for instance now Marx in a way tries to bring in the economic production. (Refer Slide Time: 28:08)

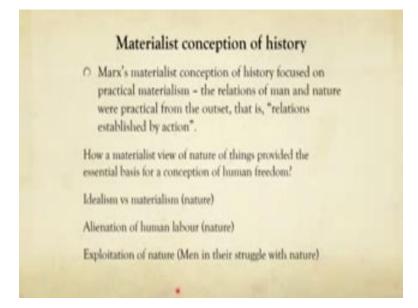


In trying to explain the relationship between human and nature that is ecology and here bring in the idea of these materialism or what is popularly known as the materialistic interpretation of history, now it is important for us to locate or begin or history size how this relation has to begin now Rochelle's in a way talks about the origins and development of whatever access it is dependent on nature as matter that is the physical reality that is independent of and prior to thought.

So what Bertrand Russell says is the physical reality innocence is prior to the existence of human thought that is physical reality has already exist prior to the human perception of nature that is to be divided into three Vedas ontological epistemological and practical, now what is on political because ontological innocence is dependent on the social that is the biological which is physical in nature and epistemological is more of a scientific engagement of thinking ,that is independent existence it tends to come up with a scientific ways.

Of asking or trying to answer things that is the epistemology whereas the practical that is the role of human transformative agency in the reproduction and transformation of these social forms.

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Now in this matter listed method is to conception of history mark in a way tries to you know focuses on the practical material that is the relations of men in nature were practical from the outset that is relations established by actions maybe, if you look at the sort of the agriculture society the first and foremost of human engagement or relationship, with nature is in killing the field or plowing the field and that perhaps is the starting point of the human nature relations and in that how does one establish this relations and how a materialistic view of nature of things provided.

These essential basis for a conception of human freedom that is maybe idealism versus matter then what is this idealism again it is sort of a perception, and ideas which is being produced over time it is not ruled right, but whereas metal ism is more of a physical reality and if you look at the economic production which is propagated by Marx in the Japanese society he talks about the elimination of human labor that is how an individual or a worker is being denied any kind of relationship. With whatever he produces that is human is seen to be not the producers of needs but the products of nature, now human has historically been in constant struggle with nature and in the process happens to engage in a certain kind of exploitation of.

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Now I will just quickly try to bring in the market in a process no doubt I will give a detailed picture in the upcoming lectures when we talk about the Marks on perception or approaches of environmental ethics for this general understanding marks, no doubt has been criticized for not really bringing the ecological issues in his works, but then there have there has been sort of an understanding in terms of the collective struggle that is that the transition from consumers individualism and domination of nature.

Well this consumerism and individualism has to be seen in terms of how an individual is engaged in dominating needs, that is trying to bring in certain kinds of profit or driven by the idea of the surplus, so once this idea of profit and surplus attempts to guide the individuals the humankind engaged in certain forms of domination of nature, that is Marx in a way also tries to explain further by bringing this idea of this social support that is to replace the quality of life and so on and so forth, now through this emergence of this consumerism or individualism the there is a social transformation which is taking place that is the quality of life that is from simple to a more complex or maybe in terms of accumulation of wealth and people do not really you know satisfy themselves or they do not they do not find it adequate to have a certain kind of subsistence way of life rather.

They have beyond for more and the form of this solidarity or changes earlier as a real time has talked about the earlier agriculture, if not the simple primitive societies where more mechanical in character but the Industrial Japanese society is more organic in nature or maybe the organic solidarity comes into and they are being driven by certain kind of skills and they are more dependent and as more and more individuals become skillful in their jobs they tends to become more dependent and the society does not in a way breakup.

But then it has evolved into a much different form of solidarity and also the sort of ecological sensibility also has changes, so what socialism in a way tries to look at is there has to be as if or changes in terms of the human perception that is priority should be given to need rather than profit that is the surplus, so if one go by this idea of meat rather than profit perhaps maybe the kind of relationship between human and nature will change and the domination of nature might not be the case.

And also human equality rather than solidarity equality because as individualism and the Methodism or consumerism comes into play there has been a lot of in equality and differences and sort of across emerges in society like for example in industrial societies, we have this the proletariat and the Buddha the Buddha are those who controlled the products and they have this power since they have that capital, now many of the socialist thinkers in away are trying to redefine this ecological thinking by trying to inject this the issues of ecological.

Sustainability or rather they try to they believe in trying to espouse the egalitarian human development.

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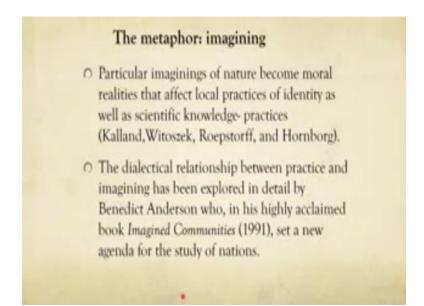


Now if we give our social explanation of this between human and nature that is the social mythology there has been a metabolic relationship, between society and nature that is human social relation to nature, so one to establish how this relationship has broken and then how it should be redefined and reconstructed, now Marx in a sense gave a critic to the deathless qua society by saying that there is a an n-terminal stick tension between the use-value and exchange-value.

That is there is sort of an internal problems or contradictions within capitalism and this conflict in a way result to sort of dominating, if not the external natural environment, so now what is the way out the nature and this labor that is that well resources of wealth despotism in a and show that ecological and the social course of production would be in essence excluded, now how do we try to address and look at this the ecological degradation then it in away eventually lead to some kind of the environmental proletariat.

That is those who do not really have a see or own the resources that is the environmental quality the have-nots in a way, now vehicles damage or dynamics of how the social and needs that is the human and nature tends to be relook and redefined in the context of a most critical understanding of the internal contradictions which evolve in the capitalist society, now as I talk about why one should engage in imagining or imaginations of nature.

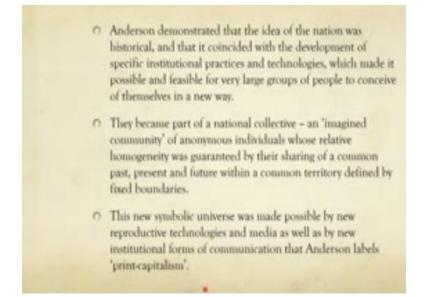
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Or maybe or the way we perceive this nature because there are different imaginings which involve in the context of this nature, which becomes more of a moral realities that in a way has sort of impact on the local practices of identity as well as the scientific knowledge practices, now this dialectical relationship which exists between practice and imagining has been in a way explore in detail by Benedict Anderson administer in his work the imagined community now you know why I am trying to bring in this imagine communities the work of Anderson.

Is to look at how this imagining of nature how one tries to imagine themselves are not restricting to a particular geographical space, but rather across boundaries.

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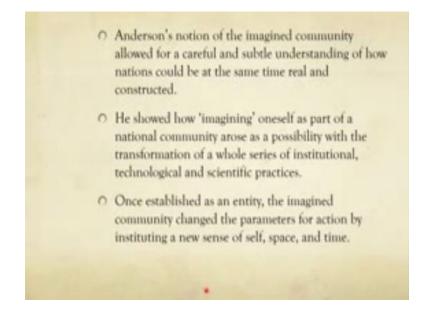
So by engaging in this imagining one does not really limit to or restrict oneself through an ecological yes, now what Anderson in away tries to explain is that the idea of this modern nation when we talk about nations a nation is a group of people or a community which inhabit as a graphical space defend from others, so this nation the modern nations what Anderson talks about is in the modern context a nation thus not necessarily has to have a state.

That is even within a particular territory or a state there can be multiple nations therefore this idea of nation has to be historically located because of the development of these specific institutional practices and technologies maybe with the advancement of Science and Technology now, if you look back maybe a few hundred years before to meet and then interact with someone you have to you know physically venture yourself traveled base and night to visit someone but if you look at the kind of at once kind of technical science and technology.

Within the friction of second you can in a way be in touch there can be always a virtual communication between two people or maybe across different communities, now therefore because of these sort of technologies the humans or the national collective does not necessarily have to be stay together or maybe they can be in a different spaces, but they still can have this

imagination to imagine themselves as a community and which of course are being guided by that the prime modulus nature of their one maybe through their culture maybe through meet or certain kind of historical connections which of course share a common past present and future or maybe within a common territory which is being defined by a fixed boundaries, so these new ideas of these symbolic universe the virtual once in a way made possible by this reproductive technologies and media as well as by new institutional forms of communication, what Anderson says as the print capitalism.

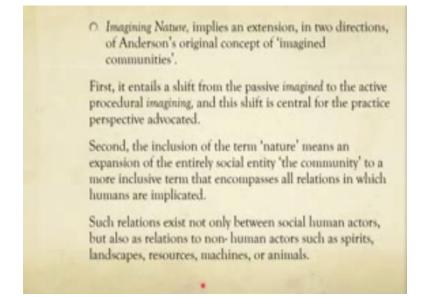
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Now this notion of this imagined community which is posited by Anderson in a way allow us for a careful and a subset of the standing of how nation could be at the same time real and constructed now even when this nation is guided by this notion, of prime modalism it can still be constructed and, so is culture now he in a way trying to show that this imagining oneself as a part of national community arose as a possibility with the transformation of a whole series of institutional technological and scientific practices.

Now therefore one has to locate in trying to Maxim's of oneself in time and space, now what is this imagining nature them imagining needs again.

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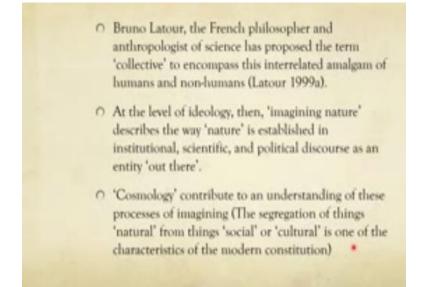


Can in a way implies an extension in two different directions firstly from the original concept of what we discussed in imagined communities, first it sort of tends to see from a passive imagining to the active procedural imagining and this in essence is central to the practice of the perspective which is usually being advocated and secondly the inclusion of the term this nature which in essence is sort of an expansion of the entirely social anxiety that is the community to a much more inclusive.

That in essence encompasses the relations in which humans are implicated now therefore this sort of relationships which exist not only between social human actors, but also the humans in relation to a different entities that is the non human fact such as spirits landscape resources messengers or enemies, now if one has to perceive landscape in relations to some kind of a past memory some kind of a cultural landscape in away can be created out of debt now therefore the relations which usually exist between only a community.

Now is being transformed and then it is in essence and compost the other anti teas which we have just talked about in the non human axis that is the spirit landscape so and so forth.

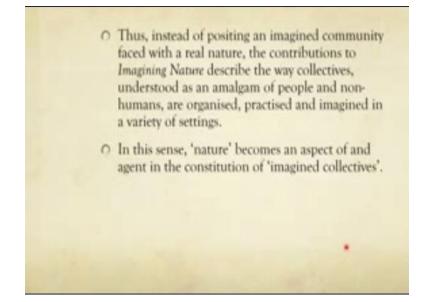
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Now a bit slightly different from what the Magnetic Anderson has discussed in the imagined communities by trying to bring in imagining nature Bruno Latour a friend is philosopher and anthropologist again has proposed the term called collective, collective and compost this sort of interrelated and valuation of humans and nonhumans, now by exploiting that very term called imagining nature, nature in essence is to be established in a more institutional scientific and political discourse as an identity which is out.

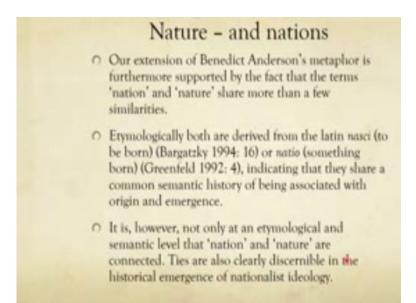
There which is outside the human or the social now in a way this cosmological understanding that it is a cosmology in a way contributed to understanding this process of this imagining, that is a we tend to you know and get in segregating things that is the natural from the social or cultural is one of the sort of general trends which is being witnessed in the modern problems that is a modern construction or the modern constitutions therefore cosmology in a way makes tries to understand this process of now therefore instead of simply positing.

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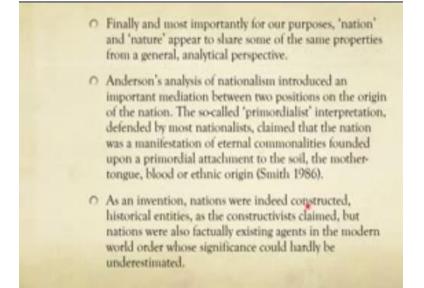
An imagined community faced with the realness the contributions of these imagining needs in a way tends to look at the way of collective understood all these among amalgam of people that end the nonhumans which are to be located understand in a much more organized practice and imagine in a variety of settings, now in this sense nature becomes an aspect of an event in the constant constitutions of imagined collectivity.

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Now how do we try to you know locate on understand this nature in the context of Nations now as we have discussed in the Andersons of metaphor that is within a way is being more supportive now if we try to decode this or break up this in a more etymological sense nations in Latin is to be born that is to be born in a particular place or nature, which is something want which in essence indicates that they share a command semantic history of beings associates associated with origins and emergence.

Now however at the semantic level this nation and nature are in a way connected because even nature has sort of an origins and emergence, because the ties are also pretty much clearly discernible in the historical emergence of these nationalist ideologies.



And for our understanding of this concept of nature or the purpose of this stationed in nature which in essence appear to share, some kind of commonalities and if we tends to see from a very analytical perspective, now Anderson's analysis of these nationalism tends to bring out an important mediation between two positions on origins of Nations that is which I said the first one which is a prime odorless interpretation which in essence is being used by many nationalists or he tends to claim themselves.

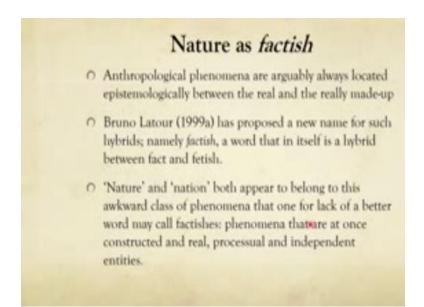
To be sort of being a spouse or guided by a certain kind of nationalism or maybe if for example multiple ethnic communities tends to inhabit the same of graphical space there has been a boundary which is usually being drawn between us and them, we and they so those sorts of demarcations are politically guided in nature and they tends to bring in the idea of this abortion nativity Latinisms and being indigenous.

So all these characters again is being guided by this primal in this interpretation this manifestation in a sense is founded upon a primordial attachment to a land or maybe a soil the ethnic origin, now there if you look across around the world there when there is a contestation between different ethnic groups this whole idea of sons of the soil who actually you know tends

to first immerse or the original originality of this particular community is easily being discussed here, now in other Poland as we talked about this invention nation where innocence constructed and also it has a historical and titles is what the constructivist claimed which is opposite to what the prime model is the cyst.

But nations also were also factually existing agents in the modern world who technically can put we understood in that sense, now as culture can be constructed so can there be a construction of these nations, now what I will try to bring out.

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Is nature has to be also seen as effective that is the anthropologist phenomena which are arguably also tries to lock it these epistemological between the real and the real invader, now in this premised Bruno has in a way proposed new name for such hybrid namely that is defective, now what is the fact is a word that in itself is a hybrid between a second effective you know like what status is not it is people yawn or urge or effectively they are screaming for something, now if that sort of idea of this practice is being brought in the context of nature and nations.

But apparently it tends to belong to the outward class of a phenomenon that one leg for better the would make all practices a phenomena therefore are at once constructed and real which is also procedural and independent in nature, now this sort of idea innocence is a central issue in the context of the philosophy and anthropology of science in perhaps in the last decade and which has been asocial construction is in debate, now the discussion here is whether to ask the natural sciences as wealth.

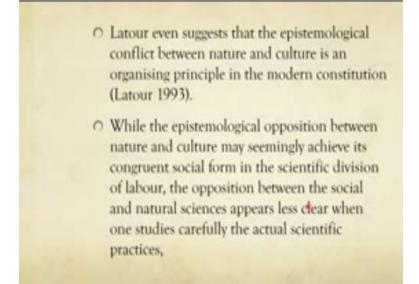
That is outside the social the social constructions and also whether they were whether these natural science is also part of a socially constructed that is a mere reflections of ideology and interest among the scientists and scientists, which are in a way and gazing in producing them now this discussion in away tries to sort of reflect essential differences between science which devotee nature and culture effectively and what lateral claims, now the natural science obviously tends to focus more on nature and then focus on the other hand is or focusing on the study of culture.

Now what is the dichotomy and then what is the connecting link between natural science and social science in a way les or further argues that Natural Sciences strive to in a way reduce or eliminate.

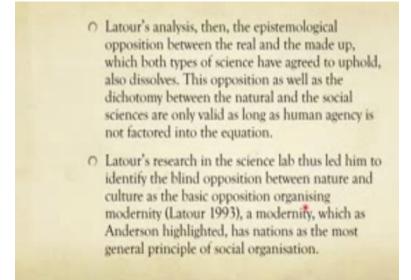
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Latour argues that the natural sciences strive to eliminate the intervention of human agency into scientific inquiry in order to ensure the 'truth' of its facts.
This epistemological conflict between two scientific cultures that has dogged the sciences for at least a century is, according to Latour, an instance of the so-called 'modern constitution' - a certain conceptual division of the world that relegates phenomena into distinct categories: nature on one side, society on the other.

The intervention of humans into scientific inquiry in order to ensure the truth of its facts because it claims to engage in scientific engagement in bringing the reality that is the truth or fact, now this sort of epistemological conflict which usually prevails between these two scientific culture has in away tends to bring out some kind of a modern Constitution that is a certain conceptual division of the rules that in a way relegate the phenomenon into distinct categories that is nature on one side and society on the other that sort of division which is normally being espoused by Latour. (Refer Slide Time: 58:23)



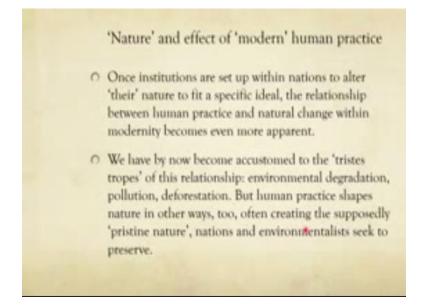
Larger the latter also further suggested this epistemological conflict between nature and culture is and organizing principle in the modern constitutions, now this epistemological opposition's which exist between nature and culture in a way tends to achieve its congruence or self-formed in the scientific division of labor that is the opposition between the social and the natural science appears less clear, when once the dis carefully the actual scientific practices, now these opposition's again will be in away valid as long as the human agency is in. (Refer Slide Time: 59:02)



As not factored into the equation now let us research in a way Latour to you know identify the blind opposition between nature and culture as the basic opposition is clear organizing modernity because a modernity which as Anderson, has highlighted has Nations as the most the general principles of social organization therefore, no matter how modernized we are still we are still and composed by the idea of a nation whether it is real or imagined, now of the nature and effect of modern human practices over here we will try to see how the institution which are normally set up.

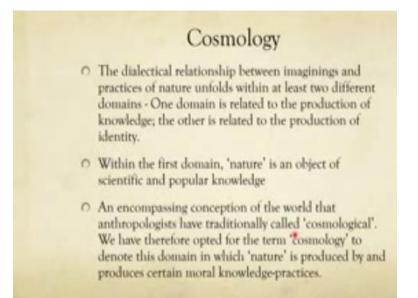
Within nations the kind of relationship between human practice and the natural chains with in modernity becomes even more apparent, now we have now become accustomed to the sort of the twisty strops that is the relationship between environmental degradation pollution deforestation but human practice in away tends to step this nature in other ways too by often engaging in creating, the supposedly the pristine nature, nature that is nation and natural environment and seeks to preserve.

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That is what I talk about in this green theory or with many of the present-day the green environmentalists they tends to see nature or tends to engage in preserving nature in a more pristine area that they are being guided by the idea of this wild earnest thinking.

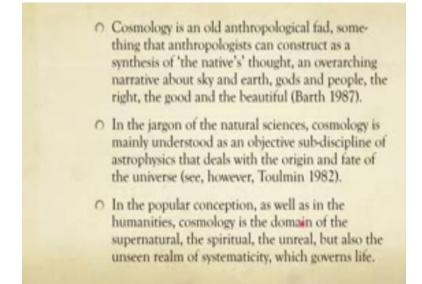
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Now in cosmology what we looked at is the dialectical relationship which in a way tends to and get in the relationship between imaginings and practices of nature which in a way as unfold at least two different domains that is one which is related to the production of knowledge and the other which is related to the production of identity, so this production of knowledge and identity is something which is to be seen in the context of the dialectical relationship between imaginings and practices of nature.

Now within this the first domain that is nature in a way is an object of scientific and popular knowledge and which in a way is an encompassing conception of the world that anthropologist traditionally tries to give an import cosmological, now therefore become cosmology in a way tends to denote this domain in which nature is produced by and produces certain moral knowledge practices, now different societies and different culture group has different cosmology that is the way they perceive and tends to tends to interpret and look at nature now cosmology in a way is.

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And anthropological that something that anthropologists can construct as a synthesis of the way the thinking of those, so-called abortions or the native peoples about how the maxims of the universe that is the sky art gods and people and the right the good and beautiful, so that sort of judgment the imaginings of nature in a way is being guided within this rubric of this cosmology and perhaps which is different again in the jargon which is being usually used by the Natural Sciences.

Now according to natural scientists cosmology is mainly understood to be sort of an objective sub-disciplines of say for example the astrophysicists that that deal with origin and fate of the universe, now the way the natural science interpret the universe and the way the human society interpret the universe is again different even when they use the same jargons called cosmology so therefore in this popular conceptions in humanities cosmology is the domain of the supernatural.

The spiritual and unreal but also which is the unseen dream of systematic city with innocence you want the human life.

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C European societies have opposed two qualitatively distinct domains. One attributed lesser values, is governed by relative human laws, we call it society. It is dominated by a wider realm, understood as an intrinsic universal order and represented at different times and places by the figures of God, Nature and the Individual....This larger domain fits perfectly into the dictionary's definition of the term cosmos, as "an orderly harmonious systematic universe, a complex orderly self-inclusive system". Since the primary characteristic of a cosmos is its claim to wholeness, no higher value than those which characterise it may exist (Coppet & Iteanu 1995: 1).

Now across societies the conceptions of God needs individuals differs and many unpropitious tends to make extensive study of the simple societies their burgeoning native and they have different kinds of a cosmology.

• For instance, while 'nature' may in one view namely that of the hard sciences, of sociobiology or cultural ecology - function as the 'cosmogenic' principle behind things 'cultural', the trend within 'constructivist' anthropology has recently been to make social classification or cultural perception the ordering principle of 'nature'.

For instance our while nature may in one view namely are in the hard sciences that is in sociobiology or cultural ecology function as a cosmogony principle behind things that is the cultural the trend within which the constructivist classifications classify the cultural perceptions the ordering, principle of nature now therefore when we talk about this cosmology in the discipline of anthropology it has it in a ways and give in trying to make a social classification or a cultural perception or the ordering principles of nature.

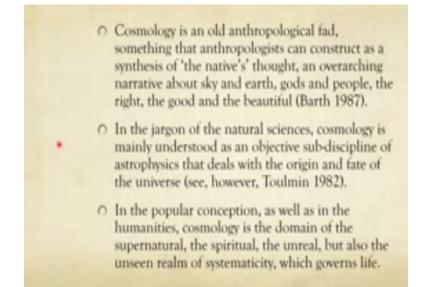
I will stop here and overall with what we have discussed is concept of cosmology which is sort of appropriated across the splint in a different way normally in anthropological understandings it is a more to do with.



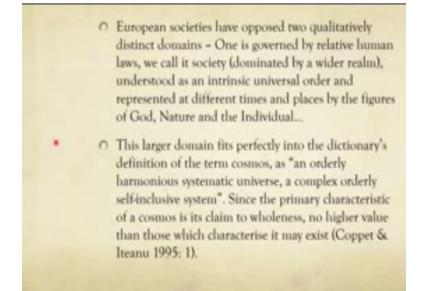
How the native societies in a way tends to make sense of their universe, so in a way for cosmology is nothing, but the worldview how they perceive their surroundings at the same time the universe where one recite, so therefore is cosmology in a way is nothing but a production of knowledge and also at the same time in the process it produces one social and cultural identity now therefore this dialectical relationship, which actually exists between imagining and practices nature tends to unfold in a different way.

Now within this domain of cosmological understanding or knowledge nature in a way is produced by more of a certain moral knowledge practices.

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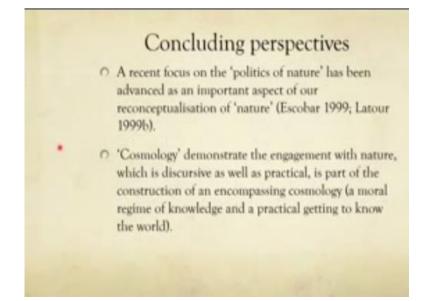
Now as we as I had discussed some of the kind of understandings from different approaches of how one maximum of there has been a sort of a division with edges between the anthropological understanding of nature at the same time the Natural Sciences, now to the Natural Sciences cosmology is mainly understood as more of an objective sub-discipline of astrophysics and cosmology in the real sense from the understanding of anthropology is not humanities is more of the domain of the supernatural the spiritual the Unreal which in essence is un synched but which in a way want the human life now, if you look at the some of the European societies which was which are perhaps.



Seem to be much more formalized is not civilized the strength of two contradictory is not opposing domains which in a way is the one by the relative human law which we all it is society worried society, society is something which is made up of certain kinds of institutions which developed over time that is, if you go by the evolutionary understandings of human society it is sort of move on from simple to a complex kind of understanding this particular intrinsic understanding of not only the universe, but also of got nature and the individual now this larger understanding domain of this compass most innocent peace and orderly harmonious systematic universe and also a complex orderly self inclusive system. (Refer Slide Time: 1:09:48)

For instance, while 'nature' may in one view - namely that of the hard sciences, of sociobiology or cultural ecology - function as the 'cosmogenic' principle behind things 'cultural', the trend within 'constructivist' anthropology has recently been to make social classification or cultural perception the ordering principle of 'nature'.

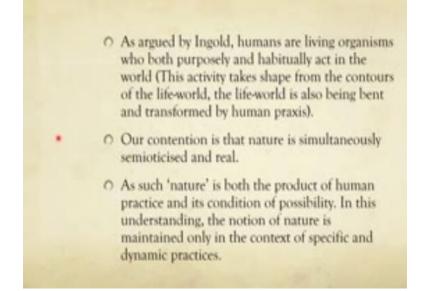
Now therefore, if we for example take the nature one may in a sense view from the standpoint of the hard sciences or the natural scientists like sociobiology or cultural ecology, if in a way function as something the principle behind like the cultural, if not within the constructivist an topology helps recently being realized and there is a social classifications or cultural perceptions of the principle of ordering nature.



Now one of the recent focus of these politics of nature in a way has also tends to you know re conceptualize our understanding or perception about nature, and therefore cosmology in a sense tries to demonstrate then gays men with nature which in a way is both discursive as well as practical and which happens to be sort of a part of the encompassing cosmology that is a moral rhythm of knowledge and a practical getting to know the world now there can be different methods of making sense of the world.

Now if you take the simplest example of the native societies why they engage in certain kinds of and ceremonials innocence those practices are more to do with the kind of how one engages or try to make sense of their universe how they perceive and, how they sort of try to constantly or interact in their everyday life in making sense of the universe or the surroundings, now our involves understanding how he tries to you know the perception of environment, if not how an individual is amazing in the environment argue.

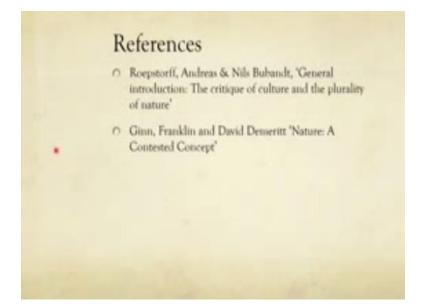
That humans are nothing but the living organisms who both purposefully and habitually act in the world, now this argument in a way test us to make the understandings of the life rules that is also being been. (Refer Slide Time: 1:12:37)



And transformed by the human practice that is when I say praxis it is the constant practices engagement in the real world that is our constant engagement, with the physical world now therefore in this discussion our contention or from what we have drawn from the scholars was working in this field is that nature in a way is simultaneously semioticised and real and by saying so assert nature is both the product of human practice and its conditions of possibility, now in this understanding the notion of needs in a is maintained only in the context of specific and dynamic process.

No one should try to locate nature contextually and not just merely by trying to see in a very objective or objectified manner, now by taking the works of Latour mainly, how this idea of nature and the human relationship is evolving and then and it has to be innocent understood in a more contextual and in a more specific world view of those communities which are engaged into.

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Now I some of that how nature in essence is a contested concept these are some of the references which would perhaps max our understanding much more simpler and easy and then I will stop here.

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