

Social History of Medicine in Colonial India

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Week 01

Lecture 04

Colonial Understandings of Indian Landscape, Diseases and Causations; Initial Concerns About Survival

Hello and welcome to the next lecture. In this lecture we will be covering in detail about something which we were repeatedly mentioning in the earlier lectures - which is about the environment, the importance of understanding the environment. We will see the various ways in which the colonizers understood or in some cases misunderstood the environment, and the connection between environment and diseases. As I said, this is very important.. because it is first of all important for survival and then of course it is better to do this as good as possible in order to ensure maximum protection for the colonial personnel and their own commercial and political and military interests. And as I said, in any situation, knowledge bestows power: the more you know, the more you are in control of things. The challenge was to reduce the sphere of the unknown and expand the sphere of the known. That parallelly reduces the level of insecurity in different senses and increases the level of security. And, as can be expected - if someone is coming from a totally new place to a new area - they come with all their own kinds of understandings, world views, the categories of classifications and all that and naturally one would expect that when they saw things here and they saw the new things, they tried to align it and see it in the light of all they already knew.

The new was fitted into what they already knew. That's the kind of effort at universalist understanding .. of fitting everything into already, pre-known categories of classification. That's one of the ways of handling the enormity of the totally new kinds of everything.. as I have been saying whether it is language, mosquitoes, the flora and the fauna. And as also you can expect, once they gained greater control, greater familiarity, one would expect the their ideas also to keep changing - which is what happened. Therefore the kind of knowledge that comes out of all this is a complex product of complex interplay of scientific knowledge, all kinds of cultural biases and also political power - as I keep reminding - those huge asymmetry of relationships . Knowledge is not something which is very pure and unadulterated by all these other circumstances. Knowledge in all contexts is always affected by all these other factors. As I said, there was a lot of

misunderstanding and also limited understanding of Indian culture, society, environment - at least in the initial days which led to misinterpretation of the causes and nature of diseases as we will see throughout the course of this course.

Knowing the other - “the Other” is a word which we will come often across in this course. Of course another day we'll discuss exclusively in a tutorial class these kinds of very special words related to colonialism and culture. In this case - the ‘Self’ and the ‘Other’ - Self is the me or my culture, my country “Self” with capital S. And the “Other” with capital O - is the other country, other culture, other religion or whatever. Knowing the Other - in this context - the Other is the colonized for the colonizer. Initially, of course, as you would expect they would have depended on a lot of intermediaries - again new place, new everything and that is one of the reasons also why they cultivated good relationships. As I was mentioning in an earlier lecture it was important to have a set of close collaborators for various reasons not only for administration-related reasons but also especially for these kinds of knowledge-related pursuits. They depended on the intermediaries and in course of time they moved to native texts and as you would expect that wouldn't have been possible initially unless they already came with the training and languages. And of course, in this case when they are encountering - mostly the first time - they had to get some level of familiarity with the language. Initially they used intermediaries - what they call the *dubashis* - people who can speak two languages - where the colonizers taught them some measure of English and therefore they can - those *dubashis* - can straddle between their own language or languages - indigenous language and the English language and they could interpret and help. In course of time, the colonizers themselves learned the native language or languages to the extent that they were able to themselves go through the texts, interpret them, come up with a lot of commentaries and in course of time they ended up writing dictionaries - from the particular native language to English. There's a lot of activity on the linguistic front - of what is also called philology. Once they had that kind of confidence to directly deal with the various texts they moved to that level. Of course it's not that they totally jettisoned the various intermediaries and helpers, but that this was an important transition. And finally they also felt it's more secure to go even beyond the text because sometimes the text may have wrong things or whatever is in the text just because something is textual does not necessarily guarantee that is entirely factual - all kinds of wrong things, misconceptions may also have been textualized. The best is to directly engage with the land, the climate and people through anthropology or whatever other subjects - trigonometrical survey or geology or botanical survey - through those various surveys to directly engage with the physical, rather landforms, which gives a greater sense of security and what you would expect - the security in terms of security of knowledge. Of course there also there could be all kinds of mistakes happening because of their own tools and approaches but at least they need not doubt

any mischief on the part of the native intermediary or something wrong in the text. One of the important forms of this kind of engagement is medical topography which I had already referred to a couple of times in earlier lectures. This produced surveys of the land, the environment, climate, population. Enormous data was collected on the happenings of disease, disease incidence and the rates of mortality, the kinds of diseases, morbidity. Also there was a very scientific mapping of particular sites and places - say for instance the plains, the hills and the kind of connection that those places had to particular forms of disease or health. For instance, the hill stations were supposed to be more salubrious more health producing. Those kinds of reports which as we will see would be useful in several ways. But in the process they also ended up producing a lot of biased views about India its people and its environment. They particularly spoke of the degenerative influence of environment on human habitations. They saw the Indian case.. they saw the land is, by and large, tropical (of course there are other places like the hill stations and other places which were not that tropical), but by and large, India was identified as a tropical place - very hot, humid and unhygienic land. All of this, of course, we have to keep in mind - we are talking in the context of health and diseases. There's a lot of reflection on how land forms and climatic factors were related to diseases.. were very causative. In this process, of course, as we know, colonialism happened in different parts of the world around this time - they had already gone to the Americas - to the especially torrid places, tropical, similarly hot places like the West Indies. All kind of comparisons were made as to how things were there and here and also comparison between these kinds of torrid zones in which West Indies or India found itself .. this kind of zone was compared to the temperate west which is more cool ..which therefore produces temperate consequences - as we know the English word 'temperate' is not only in relation to climate but also has other connotations like temperate behaviors i.e., not given to extremes. Those kinds of comparisons were made. How was all this related to aetiology? (Aetiology is the study of the cause of disease.. causation of disease). How were these.. whatever we said now about landforms.. were understood in terms of their causal effect with regard to disease. Here, we will introduce a new term called "environmental determinism" - as you can guess, to put it in simple words, it is the strong belief that the environment determines the state of health and disease. Diseases, by and large, come due to some kind of problem, alterations, peculiarities of the environment and its associated climate and weather patterns. One of the theories that come under the broad paradigm of environmental determinism is the miasmatic theory whereby it was believed that most of the diseases were caused by the presence of miasmas which were kind of unpleasant, unhealthy noxious vaporous presence in the atmosphere and then which was related to climatic factors like the heat and other things like marshiness, the sludge, the coming together of rain and mud for instance during flood seasons, and the rotting of plants. It can be caused through various kinds of factors ..these things are supposed to produce those

kinds of exhalations the vaporous substances.. the miasma, and diseases were attributed by and large, at least many of the diseases were attributed to the presence of this miasma. Not only that - it's not just about the physical health - climate was also held to influence people's behavior, their culture, their manners. Because of the particular places Indians found themselves, they were considered to be generally having very bad habits like being dirty, unhygienic and many of the religious and cultural practices like pilgrimages, bathing on the banks of rivers or taking holy dips during particular festivals and the same water being used for different kinds of things - bathing as well as sometimes the same water is also consumed as holy water - these kinds of religious habits and practices were seen as promoters of disease. And, of course, also comparison was made between the kind of approach that Europeans have towards housing, towards settling: They pointed to the better state of European-settled areas within India as opposed to Indian settlements in terms of street planning, the kind of buildings - with proper ventilation, the drainage both inside the house and outside. On the other hand Indian settlements were considered very haphazard, unplanned and therefore ending as repositories of filth. And again there's a connection to disease - it was held that these were again promoters of disease and Indians were blamed as being very reluctant towards town planning, proper planning - leading to very uneven development. In this way, there was a lot of essentialism and stereotyping. Again these are words which we will be discussing further in detail throughout the course and especially during the tutorial on these kinds of culture-related terms. But we anyway have to delve a bit into what it means: essentialism is basically reducing a culture or a people or a country to a few essences.. the kind of stereotyping.. for instance, saying "Hostel students are always like this", "Indians are always like this", "Women are always like this", "Girls are always like this", "Teenagers are essentially this".. That was a kind of essentializing.. for instance one of the standard essentialisms was that Indians are essentially 'otherworldly' : they are more concerned about the other world, the next life, whereas it is left to the British, the westerner to worry about this world and explore its beauty and its benefits. So that is essentialism and stereotyping, and medical topography served as one of the channels through which a lot of essentialism happened - in fact some of the medical topography reports spoke not just about the landforms and climate and the connection of those or even food habits to disease, they even commented.. felt free to comment.. about music: say Bengali music is like the blaring of elephants.. like some animals in distress. Of course those kinds of things you wouldn't say now due to political correctness. But in those days again that kind of asymmetry allowed very free and open, reckless comments such as these. Medical topography in the name of studying the land and climate and connection to disease also ended up producing a lot of these stereotypes and one important outcome of all this was the creation of a new paradigm, a new category of understanding called the tropic or the tropical and that became an enduring trope an enduring paradigm. In fact as you will see later on, a new field of medicine itself came - called tropical medicine and

Schools of Tropical medicine were set up not just in India for instance in Calcutta, but even say one in Liverpool and another in London. So, that is something very new in the world of medicine itself..that field of medicine or more broadly the paradigm of the tropical. I was talking earlier about the 'Other'. The tropic was seen as a big Other and with a lot of that Otherness. As I was mentioning earlier most of it is also developed from their initial encounters with places in the Americas or the West Indies, for instance. Those kinds of hot tropical areas were seen more as fitting for slavery and plantation rather than European settlement and normal agriculture. And as we keep repeating, these are not just very scientific.. just merely scientific pronouncements... mere matters of knowledge. They had a lot to add to the asymmetry.. to the construction of the colonized in particular ways even as they drew from, they banked themselves on, the advantages of the asymmetry and some of these things continued to persist the medical topography as the medical knowledge advanced people moved on to other ways of finding relationship between diseases and potential causes. Even when the rest of the world moved in those directions medical topography persisted in spite of being challenged in the western world. That's something we have to keep in mind and considering all this there's a lot of concern about survival..about the British, the colonisers, own survival. Initially they saw the tropic or many places in India as very dangerous and not very suited for any kind of permanent settlement. Of course, coming and going for trade is one thing but as far as the question of permanent settlement, they were not very hopeful. They were very pessimistic and all kinds of connections were being made between the heat and the particular parts or processes of the body. For instance, the secretion of the bile in the liver was supposed to be augmented according to the level of the temperature.. the higher the temperature, the higher the secretion. This excessive secretion can lead to all kinds of biliary disorders and in fact it did happen. They did notice a lot of biliary disorders among the Europeans and of course why it was not all that challenging to Indians. Of course it's the same human body wherever it is. By and large, it is the same parts and human anatomy, the same bile, the same liver. But it was suggested that Indians had got acclimatized, used to, over centuries to the secretion whereas the foreigners.. people coming from far away will be more vulnerable as opposed to Indians. Of course we should notice that on the one hand it was felt that Indians were acclimatized - but later you'll also see on the other hand the climate was also blamed for rendering Indians very vulnerable. That kind of paradox was there. But anyway in this case they felt that the Europeans were more vulnerable and Indians better off because of long years of being used to the particular kind of climate and whatever secretions and other resultant processes. In fact, the colour of Indian skin was itself attributed to the very active secretion of the bile. It is very active secretion but not very pathological - not disease-causing because they're used to. It's not dangerous in terms of disease causation but the skin color can be attributed to this and based on these and several other factors they felt there were clear differences in the constitution of the people based on this.

Constitution in the sense constitutional difference is not like the Constitution of Britain or Constitution of US or the Indian Constitution - that written document which is used to run the state. Here constitution is the bodily constitution - they felt there was a clear difference in the bodily constitution based on race. This is one of the ways in which race as a category also gains greater foothold. There were clear constitutional differences between people of different lands and different races and therefore there were limitations on the survival of a particular race in a totally alien land - in this case, the survival of the British was a question mark here. Also this kind of a view, this kind of pessimistic view gained greater credence because of the the number of deaths and the levels of sickness. In fact, sometimes there were more death of the colonizers - the British - through disease than through military or other causes - of dying through enemies' hands. But as we will see, all of these changed in course of time because as I said, of course, we can apply the same logic that they applied to Indians.. in course of time by the same logic of acclimatizing.. of course it's not like they have been there for too many years.. but as they were trying with the plants and certain other things, acclimatizing was a very important element in colonial science generally: trying to make something which comes from a totally different climatic environmental situation to grow, to adapt in a particular place. Particularly this was very common in the world of botany. Many plants which were particularly commercially important were brought from alien lands and acclimatized and just as they said that Indians were less vulnerable because of being used to.. maybe a little bit of that may apply to the newcomers also over a period of time: the level of morbidity and mortality could be reduced. But more than that because as I said, in the Indian case, there's an advantage of that having been developed for centuries. But in this case.. in the case of people coming from outside, more than the adaptability which was still there, more than that, was the kind of advancements in medicine, the other fields - finding new ways of adjusting to the food, the drinking habits.. could enable them to survive better, bring down that mortality and morbidity rates. That's why I keep repeating: the more you know the more you are in control of things; the more knowledge you acquire related to these kinds of connections between particular effects of climatic factors the more you're in a position to adapt in spite of the initial misgivings, in spite of all the initial pessimism. Of course, now we know in retrospect, it's not that the British ran away. Though they did not end up as a settler colony they did stay here for more than two centuries. So, all of these, these were initial misgivings, initial pessimism. You should keep that in mind .. how did all this change. Of course the key thing is knowledge as always .. how they used the knowledge and how they overcame this and not only stayed back and did more commerce, but also came to control the land, rule over it. And not only that, they took the 'charge' of taking care of Indians' own health however half-heartedly, however reluctant to spend. For good or bad, they were presiding over the public health of Indians themselves.. the very Indians they thought were more attuned to this climate and were very less vulnerable.. The same Indians'

health was in their hands ..in the hands of ones who feared about their own health and survival and in course of time they were blaming how Indians were weak victims of climate .. how they (British) have shown great resilience in going all around the world whereas Indians are victims of their own climate, the torridness and all that. That will be an important theme throughout this course and we will continue them in the future lectures. That's it for now in this lecture. See you again in the next one. Bye bye.