

Tools and Technologies of Language Documentation

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Lecture-05

Lecture 05 : Linguistic diversity, biodiversity and wellbeing

Welcome to the fifth lecture of the course Tools and Technologies of Language Documentation! Today we will talk about why do we need to save languages. So in my last lectures, I talked about endangered languages, why languages are getting endangered and how languages are getting endangered. But why are we talking so much about endangered languages? Why do we need to save languages? Why it has become a topic across the globe? Why people are actually trying to document and save languages? So, there are various reasons for that. One is language is considered to be the storehouse of indigenous knowledge system and these knowledge system passes from one generation to other through language. Then we have also seen that linguistic, cultural and biodiversity, all are related. So, effect on one can be effect on the other.

So, if we see that linguistic diversity is reducing, it can also similarly affect biodiversity. We will also talk about language and world view. How different languages actually shapes world view, because whatever we see around us is always affected by our language. And that is why when we are talking about different languages that means, we are also talking about different world views.

And missing one of these languages also mean that we are missing out on the world view related to that language. It has also been seen that language and well being are related, how we will know through this lecture. So, studies have shown that linguistic, cultural diversity, all are closely related with biodiversity and it suggests that combined biocultural resources are integral to survival of earth and life on earth. So, basically when we talk a lot about saving biodiversity and we do not talk much about linguistic diversity, we are not doing it right because to save biodiversity also we need to save linguistic diversity. So, deeper consideration of biocultural diversity and indigenous knowledge can enhance the understanding of diverse human perception and values of diversity,

ecosystem dynamics and natural resources.

Because through a language we know about the geography of that locality. So, when the language is lost, we will also lose the knowledge system related to that geography. So, as I said loss of linguistic and cultural diversity can also lead to loss of biodiversity of a particular area. So, when we talk about biodiversity we are also talking about interdisciplinary research and interdisciplinary research have shown that spots where there is high density of biodiversity, in those spots we have also found high number of languages as well. So, in places where there are about 70 percent of the world's languages, there we have also found more biodiversity.

So, we can see that they are directly related to each other. So, when an indigenous language is lost, not only does the knowledge accumulated by the community of its speakers fade away, but also the world's cultural and biodiversity also fades away along with that. And so, safeguarding diversity of languages is as important as saving biodiversity, because we see language, culture, nature, everything is very closely related. In a language, you will find words which are surrounding that area. But in some other languages you may not find those words.

And I will show you examples for that. And also, through these words we also come to know about various occupations or varying lifestyles like hunting, fishing, all those things. So, there are various knowledge system related to that related to that geography which is hidden in the language and which we may not find in the other languages. At times it even becomes difficult to translate those concepts or those ideas from one language to other. So, coming to these examples from Mahali you will see that these are some of the words for mushroom, which are used in Mahali.

Mahali people they have lots of mushrooms surrounding them; some they eat and some they do not and they can easily identify the difference. In some of the mushrooms which are white colored smelly, they are non edible ones. So, they know they have that knowledge that if they eat it, it is a poisonous type of mushroom; it can harm them and there is a word for that particular mushroom. So, those who are not accustomed to so many types of mushroom may not understand the difference. So, one might think that all the mushrooms are looking same.

Or if they are not looking same, they are looking different, but still there might not be terms in the language to mention those. So, like in my language, I do not know so many terms of mushroom. You can actually think about your languages. How many types of mushroom can you identify using your language? That means, how many words are there in your language to identify different types of mushroom? So, here you can see that there

are four types mentioned. So, edible one which grows in marshy soil.

So, you can see that this 'karan' mushroom, when it is mentioned, the speaker of the language will easily know where it grows. So, it is not only about whether we can eat it or not, it also gives information about where it grows. So, you are actually getting lots of information from this one word, one that it is edible, another where it grows and some also talks about the colors. So we talk about the third one, you know that this is blackish non edible mushroom. So, they have a particular word for that.

So, if these words are lost, the knowledge that this is a black type of mushroom which is non edible which should not be consumed will also be lost. So, because when we say 'kamac' in the community, they will know that this is a particular type of mushroom which we should not consume. But if I am new to the area and I am looking at so many mushrooms, I might not know which one should I consume and which I should not. And I do not even have words to refer to these different types of mushrooms. So, there are various different types of examples which we can find in these speech communities which can tell us about the surroundings of the area.

A very interesting example is that of a type of snake which is found in Andaman Islands. So, this is a snake which is non poisonous and actually it stays on trees. So, girls use it to hold it because when it is hold, then some type of oil comes out of its body and this oil is used as moisturizers by the girls. So, one might get scared of snakes and one might try to kill it, but the community members they know that these snakes are found in this region which are harmless and they can actually, their oil can be used as moisturizer. And, they actually do not kill it they do not do anything they just catch it for some time, use the oil and then leave it.

So, you can also see that they are not killing it for the oil, they are leaving it, but using it also. So, we can see that how knowledge is actually being used for one's own benefit and also not harming the nature. So, both are there together. Then we can see another very interesting example which is from Tuva community, where they use a particular process of killing sheep and this process is used because they say that when this process is used to kill sheep then they are not hurt. So, they actually die peacefully.

So, they have to kill sheep for various reasons. But when they are doing the process, they are trying to do it in a non violent way so that the sheep is not hurt much. And here also we can see a compassion towards nature, it is not like hunting it anyway and then using it. So, we see a compassion towards nature; that we can find in various speech communities. And when you see that this particular language is lost, we will also lose this word because when a language is lost, the words will also be lost from the language.

And 'khoj ozeeri' word will be lost along with that, the whole process that a particular nerve can be pressed to kill a sheep will also be lost. So, people will not know what 'khoj ozeeri' will mean and then the whole action will also be lost, the knowledge behind it will also be lost. So, the contribution of indigenous knowledge to climate action, biodiversity, food security, land and water management and health is undisputed worldwide. So, everyone now understands that it is very important to save this indigenous knowledge system. And again I will repeat, that indigenous knowledge system can only be saved through languages.

Because if the languages are not there, how will this knowledge be transmitted from one generation to another? Because every languages have its own terms, own words, own explanations, own world view. So, it has been recognized across world that to save the world, to save the earth itself and to face the modern problems of global warming and all these, we can always take help of indigenous knowledge system. So, indigenous languages and related knowledge are actually linked with preservation of biology and biological diversity. There are various restrictions in many speech communities. So, that is also a way of saving the nature surrounding the community.

So, when we talk about preserving nature, there are various speech communities which follow different paths for doing that. Some follow ways of totemism, some follow ways of taboos and restrictions. So, there are various means which can be found. So, totemism is a very common thing which you find in India and also outside India. So, what happens is that it has been considered to be an effective tool of conserving wildlife.

Though the community members do not do it for that, they are not conscious about that, that they are conserving nature by following totemism, rather it is their belief. So, totems are found among different clans and the belief is that there are certain natural objects like trees or animals or plants, which are connected to a particular clan; either they are considered to be their ancestors or their saviors, in some way they are connected to a particular clan and when a particular totem is connected to a particular clan then that clan can never harm that particular totem. So, this totem can be anything, like I mentioned it can be an animal, it can be a particular tree. So, other non-clan members can consume that animal or can cut that tree, but the followers of that totem will never do that. In fact, at times they will also worship their totem and they will never harm their totem.

So, that is always there. Hansda is again a very common surname in Santhali and other Munda languages. So, Hansda is believed to be descended from goose totem. So, now the people who use Hansda surname will never harm goose, they will never consume goose, they will never harm it. Though their neighbors or other clan members can do it, but

people from this particular Hansda clan will never do that. So, you can see that when all the people surrounding them are actually consuming goose, but this particular clan is not doing it, it is also a way of preservation because if everyone does then the particular bird might get endangered.

But when a group of people are not doing it, not consuming it, so that actually is saving it, preserving it. Similarly, we see Tiv people from Nigeria regard the green snake as a totem. They believe that green snake actually help them in crossing the river Congo and that is why they never kill green snake. So, a modern man can see a snake and kill it. So, we often are very scared of snakes and other insects and try to kill it or ask people to come and kill it, but in some communities we see that they are not doing it.

So, they do not kill green snake and you will be amazed to know that also, there are communities which think pythons are the protectors of humans. So, they do not kill pythons. We hear the name python and we are scared; we think that they will actually eat humans and all, but then this particular group, they believe that pythons are actually their protector and they should not be killed. So, when you see these type of belief system being passed on from one generation to another of course, they will try to save the surroundings; they will try to save the nature right. So, it is somewhere related to protection of biodiversity, it is not like killing them because one is scared or killing them for their own benefit, it is about actually protecting it.

So, one thing is about protection, another thing is that human race is not looking at itself as the superior to other species. There is that sense of belongingness and also, there is no sense of oneness that I am the only being on earth. So, you see how they are actually relating human race with their surrounding. So, python is a type of living thing, human beings are also a type of living things and somewhere they are perceived to be on equal ground and that is why one is actually helping the other, one is protecting the other and that is why the other should not kill the protector. So, we see that there is sense that both are there, both are related it is not like humans are unique and they are only one, the superior one in the world; it is not perceived like that and which actually helps in maintaining biodiversity.

As I mentioned there are taboos and restrictions. So, it is common practice for us to consume everything available in the nature. So, we can consume everything whatever is actually consumable. However, this can lead to endangerment of certain types of birds, animals or trees. We also know that certain birds have become endangered because people consumed it a lot.

But then when communities which actually totally depend on nature, they restrict

themselves from doing that. I gave you the example of Mahali, they prepare baskets of bamboos. So, they have to cut bamboos regularly to make baskets, but on Tuesdays they do not cut bamboo because they believe Tuesdays are the birthday of bamboo. They also do not cut bamboos on Sundays because they think if on Sundays they cut bamboo then the person who is cutting it will be infected by fever.

and the person might fall sick. So, these two days they will not cut bamboo. So, there is this restriction and belief. So, this belief is somewhere helping in preservation. So, if everyday bamboos are cut, there will be no chance for them to grow, but when on two days of the week they are not cut, they will get chance to grow. So, these are various terms of bamboos in Mahali.

So, these are written in IPA and you can see that there are so many names for bamboos. So, there is one term which is just ma which means bamboo and then depending on its feature, whether it is thin or thick, dry or raw, there are different names. There are also classifications based on which part of the bamboo it is and where it will be used to make baskets. So, you can see that strings of a particular bamboo can be used to make basket and again other part can be used to weave baskets. So, depending on the features for making baskets and depending on the features of the bamboo, there are so many names of bamboos.

And again, why so many names are for bamboos because these communities generally reside in places where there are lots and lots of bamboo trees and all of them are different. Actually I will like to share my own experience; when I was in the field for collecting Mahali data, I saw so many trees and then they would point out that this is this particular bamboo and then they will point to other one and name it other. But I could not actually differentiate between all these types of bamboo. For me, all of them actually looked same. Maybe I could identify between a raw and a dried one, but mostly all of them looked same to me.

But then a child of Mahali community can easily identify different types of bamboos and at the same time, he or she can also name those. So it comes naturally to them, they can easily perceive it and then they can tell the name of it. But since it is not part of my language, neither can I see them and of course, I do not know the names. So, you can also think about how many names do you know about bamboo. So, if you stay in a place where there are lots of bamboos, maybe you know lots of names of bamboos, but people who are not so much accustomed to different kinds of bamboos may not know about it.

So, you also see that when the surrounding is full of so many different types of bamboos they also have terms for them, but when the area do not have so many trees of bamboo

then we do not have names for that, because the language evolves according to the geography of the area and that is why it is very important to save languages because the language actually describes the surrounding the geographical area of that particular speech community. So, in the cultural and religious practices of the indigenous communities we often find deep connection with the nature. In many of the major religions also you will find or many of the major cultures you will find that people worship trees on particular days. So, there is that connection in indigenous communities we find it more. So, mostly their belief system showcases their deep respect and bond with the nature.

So, when there is some part of tree or a particular tree is required to perform a particular ritual or one particular day, a particular fruit or tree is worshipped, we know that there is a connection which is being built or which is being respected. And in lots of communities like Kurmali and others, we see that there are particular days when they worship a particular animal or when they worship a particular tree. So, that is also way of creating the bond and also they will not harm the animal which they worship or they will not cut the tree which they worship. So, it might not be very direct, but somewhere there is the preservation process going on. The fact that the rituals and customs practiced by the indigenous communities fall in line with the modern notions of nature conservation has been accepted worldwide.

So, these practices actually helps us in nature conservation which has become a major issue in modern world. Oneness with nature through connections to place, tradition and land, peoples worldview or dependence on nature is the code to living for many local and indigenous people. So, we see that the worldview is actually created depending on the language and the surrounding. So, language is central to the way people learn about the natural world because through language they can only name different surroundings, they can name the process which are going on in their surroundings and it shapes the world view. So, again I will like to share a word with you which is 'bonga' which is not only used in Mahali, but also used in Koda and other Austro-Asiatic languages, which are mainly spoken in West Bengal, Orissa and Jharkhand.

In these languages, 'bonga' means god, 'bonga' also means sun, 'bonga' is also used with months because months are regulated by the sun. So, 'biha bonga' means the month when marriages happen. The months are also perceived like some divine power. So, sun is the god which actually regulates nature and everything.

So, sun is the supreme power you can say. We can very loosely translate it into the word 'god'. It is not actually accurate translation, but then we do not know which word to use for this word 'bonga' because it has a wide semantic range which actually we cannot

capture because we do not have that world view. For them sun, nature, months all are connected and that is connected, we know scientifically and that is why this one term is actually used to cover all these. Of course, with sometimes there are compounding with 'bonga', sometimes 'bonga' is used in isolation. There are also house gods and this house god is also called 'ara bonga', 'ara' is the house and 'bonga' is the god.

So, 'bonga' is also used for house god. So, we see the use of 'bonga' in various places where there is something related to the supreme power. And this perception, that means nature is actually equivalent to god, that is what we can tell from this world view. And this is there within the speech community and when nature is being perceived as God then of course, nature will be worshipped rather than it will be harmed. So, there will be always process for nature conservation rather than harming it, cutting trees or harming it. So, language and well-being what do we see? It has been seen in various reports that youth suicide rates effectively dropped to 0 in those few communities in British Columbia, Canada, in which at least half the band members reported a conversational knowledge of their own native language.

So, it was seen that where people are using their own language in day to day conversation, there the suicide rates were actually less. By contrast, those bands in which less than half of the members reported conversational knowledge, suicide rates were 6 times greater. So, where actually people are losing their own language, shifting to other languages, their suicide rates were found more. So, and it was shown in a report. Why it is happening? Because with the language is also related one's own identity.

So, sometimes shifting to other language, one may not actually adopt all the cultural traits or the identity of that community and somewhere one's own language is also left behind and that creates a problem. So, it has been seen that somewhere language is also related to our well being. So, it is not only about the well being of the earth, it is also about one's own well being where language plays a vital role. So, now I will like to conclude by saying languages are a storehouse of knowledge as I have shown, that language gives you indigenous knowledge which is passed from one generation to another. And we also know about our surroundings, about different things which are happening around us through language.

So, people's relationships with nature involve both people obtaining benefits or services in one hand while undertaking duty to care for and manage their natural landscapes on the other hand. So, it is actually two way relationship. It is not only about taking, it is also about giving and caring. And that is actually we can easily see through these indigenous speech communities where one hand they are using nature of course, because they have to we all have to. But on the other hand they are also caring the nature, there are also

ways to preserve nature, it is not only about consuming it in totality.

People's capabilities enable them to connect with their traditional lands and are critical to be passed on from one generation to the next for managing those lands and surroundings. So, language is very important, so that this feeling towards nature, towards one's own surrounding, towards own identity. These all knowledge, these all feelings are transmitted from one generation to another. If language is lost, this transmission is also lost, because there will be no medium to pass this knowledge.

And it is not only about the knowledge, it is also about the feeling. So, when there are taboos or when there are restrictions, the children, the community members, they follow it. Why? Not because they know the rule that it should not be done because they believe in that, that it should not be done, that it is wrong to do it. So, this believe related to totem is so strong; it is not based on some rational thinking rather it is a belief. So, this believe which actually makes one conscious about one's surroundings is very important and that can be passed through language. The self imposed restrictions through cultural norms and practices permit only small scale alterations of the landscape.

Thus allowing people to continue practicing their knowledge and benefiting from their services to date. Indigenous and local case studies clearly demonstrate that traditional ways, if supported, maintained and appropriately applied, can help sustain natural resources because of people's ethics, customs and traditions which are site-specific, thus offering micromanagement of earth's diverse ecosystem. Because in every locality, the geography is different. So everything, the flora and fauna is different. So everything related to that area is different, but when there is micromanagement, when the communities living in that area can manage that area.

So, that is how ecosystem can be maintained, diversity of the ecosystem can be maintained. So language, culture, geography, identity, all are very very closely related and effect on one can actually affect the other. So, when we are talking about Language Death or we are talking about Language Endangerment, we are not talking about it only because we know loss of language will also create a gap in biodiversity, it can also affect various other things which are related to human beings. I hope you enjoyed this class. Please go through these readings. Thank you!