## **Tools and Technologies of Language Documentation**

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Week-05

Lecture-22

Lecture 22 : Sapir–Whorf hypothesis

Welcome to the 22nd lecture of the course, Tools and Technologies of Language Documentation. Today, I will talk about Sapir-Whorf hypothesis. So, Sapir-Whorf hypothesis is not directly related to language documentation, but it is good to know about it because I have mentioned, when we are documenting a language, we aim to document the world view of the speech community. And that is what Sapir-Whorf talks about in the hypothesis, that is language shapes our world view. This hypothesis have two versions, one is the stronger version and another is the weaker version. One is known as linguistic relativity and other one, as linguistic determinism.

So, I will talk about both. I will also give you examples in support of this hypothesis, and how we know through this hypothesis that, language shapes the world and shapes the way we look at the world. And this is the world view that we are talking about and we want to capture that, when we are talking about language documentation. Little bit about Edward

Sapir.

So, he was an American anthropological linguist, who was student of Franz Boas and we know, Boas was an anthropologist. So, in Status of Linguistics as a Science, he argues that for language's socio-cultural and even, psychological role in culminating the distinct perpetual and cognitive structures. So, basically language shapes our psychological and cognitive structures. So, what we are looking at, how we are perceiving things are shaped through our language. That is what he argues.

So, speakers of different languages necessarily have different world views because languages shapes the world views. So, when you will see people from different speech communities, you might see that their perception towards the same incident or same thing might be very different and that is claimed to be because the languages are different. When we look at Whorf, he was not a linguist, but he worked with Sapir and he worked for the Native American language, Hopi and his work became quite famous. So, both of them together, it is known as Sapir-Whorf hypothesis. This hypothesis, also known as linguistic relativity hypothesis, because it is actually the relation between the language and the world that we dwell in, refers to the proposal that the particular language one speaks, influences the way one thinks about the reality.

So, when we are looking at things, when we are surrounded with different things, we have different realities and this reality is actually thought upon or expressed through our language. So, it is said that language shapes our thought process, our way of perception, the way we look at things. So, perception and expressions are based on thought. And when we learn a language, we are acquiring it. So even before birth, we have the exposure of our native language and then, slowly we grow up with the language.

So, we do not learn a language. We are not talking about learning a language, we are talking about the acquisition. So when we acquire the language, we do it very unconsciously. A baby acquires a language that she hears her parents or caregivers talking in and then, that actually shapes the way she looks at the world. So the world view, the thought process, everything is actually shaped by the language that she acquires.

So, one's language shapes one's view of reality. So, you will also know that reality, here means the world view; how reality can be different from individual to individual. And when we are talking it in terms of a speech community, we see that there are various terms in a language, which are not present in the other language. So, because the reality or the environment is perceived in a particular manner, and this perception is expressed through language. From the adults, children acquire and also, their thought processes are shaped according to the language, that they are using.

Sapir mentioned, "Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood.." So, it is not only that we are living in society alone, and doing the social activities, "..but are very much at the mercy of the particular language which has become the medium of expression of their society".

So, we are actually dependent on the language to perform our social activities. It is not like we are just performing the activities without a language, because without the language, it is impossible to perform these social activities. "It is quite an illusion to imagine that one adjusts to reality, essentially without the use of language". So, if we think that we know our environment then also we need the language. So, you cannot

actually imagine your life without language, because whenever we are looking at something, we know that particular thing has a name.

If I say you 'apple', you will have a picture or image in your mind. So, you know that this particular word is related to this particular object of the real world. So now, that image you have, if I ask "Draw an apple." Everyone will draw a particular type of fruit, that might vary from individual to individual, but that will actually denote a particular fruit. So, those who know English will understand what I am talking about.

So, no one will draw a banana or a mango and say that this is what you mean. So now, an image is created in our mind, when I say the word 'apple'. What it shows is that, when we are talking about language, it is not only a means of communication; it is also creating an image in our brain. It is creating or it is the reflection of the reality, that is created through the language. And when we talk about being a social animal, or performing social activities, then also, we are actually dependent on the language.

So, we have various social rituals, which we follow daily in our day-to-day life, but for all these also, we need to follow certain norms, which we express through languages. So, when we meet someone, we greet. So again, there are different places; people greet each other differently. Some will say "Namaste", some might say "Ram Ram", some might say "Good Morning". So, there are various ways of greeting each other.

It is not like, you do not express it through language. So, all these social activities are actually performed through the language. That is what he says. And when it is there, that means, it is also shaping our thought process, our own reality. The stronger version of this hypothesis, which is also known as Whorfian hypothesis, because he focused more on

So, he said that the world we know is primarily determined by the language taught by our culture. So, he says that whatever we see the our world view, is dependent on the language which we acquired. So, this is called Linguistic Determinism. Thus language differences also present the basic differences in the world view of different cultures. When there are different speech communities, their perception towards the world will vary because their languages are different.

So, that is what he says. He says that everything we perceive is actually based on the language that we have acquired. So according to Whorf, "we dissect nature along lines laid down by our native language". So, we can look at the nature and we can talk about it and the way we perceive, like we say "foothills", foot of the hills. When we say foothills, that means, talking about the lower portion of the hill. we are

So now, we know that hills, they do not have foot, but it has been metaphorically used. We know that the bottom portion of the hills are called "foothills". This perception, it is not actual thing, but we are using it. So, these type of perception and every other world view is actually decided by the native language that we use.

That is what Whorf says. So, language influences the speaker's way of thinking, how one thinks. Linguistic determination is the claim, that language determines or greatly affects the way one thinks or perceives the world. The way we see our world is completely determined by the language. So, it is like totally determined by the language we use. That is the stronger version of the hypothesis.

It says that our worldview is totally dependent on the language that we use. As I mentioned, there is a weaker version of the hypothesis. So, what does the weaker version says? The weaker version says that it is a both-way thing. So, language influences the way we look at the world and also, the world surrounding us influences our language.

So, it is a both-way thing. Both are influencing each other. Languages do not grip community so strongly as to prevent, at least some individuals from seeing things differently. So, that is also there. It is not like you are blinded by the language, that is what this version says, that you can also see beyond your languages at times. And in this hypothesis, if social situation becomes strong, then language bends and undergoes change.

So as I mentioned that, our environment, our society is also influencing our language. So, when we see there are changes in the society, in our environment, that is reflected in our language. So, it is a both-way thing. So, the way we perceive nature is decided by the language you use and when we see there are changes in our society, in our environment, then that is also reflected in the language. Thus it proposes that society and culture also influence and change the language, and that is, I think, very evident nowadays.

You can see how, with lots of say, technologies available and other changes in the society, we can easily see those things being reflected in our thought process and also in our language. So, we have lots of terms related to all those changes and then, our thought process have started working in that manner. So, like in the older days, if someone said "mouse", then one might have thought of an animal. Nowadays, the first thought that comes to us is the digital mouse. So now, our thought process is also changing with the environment change in the and also, our language is changing.

So, what this theory, the weaker version says is that, it is a two-way thing. So, language

influences our world view and the world around us also influences the language. So, linguistic relativity says that culture is controlled and simultaneously controls the language. So, it is a both-the way. A linguistic relativity hypothesis says that some particular aspect of language influences some particular aspect of cognition.

So, they also focus on certain aspects, which gets more easily influenced by the culture and how it influences the language. According to Whorf then, the grammar system of a language is not only a tool of expressing ideas, but also forming those ideas. When I am talking about language and language influencing our culture, or our perception. It is not only about collection of certain words. It is not only that in a community, there are say, 10 colors for a rainbow and in another, there are only 7.

So, it is not only about words or words which are actually showing particular objects, it is also about the structure of the language, the grammar of the language. In many languages, you cannot say certain words without saying a possessive. Like for example, you cannot say "village" in isolation. You will have to say "my village". You cannot say "arm", like "hand"; you will have to say "my hand, his hand, her hand".

You have to say "my village, his village, my house, her house", things like that. Why? Because these objects, like body parts and even other objects, like "village", "house", these are inalienable to person, to living things, because they perceive the world in a certain way. And in many Tibeto-Burman languages, you will find this feature, where the speech community, they perceive these objects like body parts, they cannot observe it or perceive it in isolation, they are always connected to a particular body. Similarly, villages and house they are also so close, that they cannot be perceived in isolation. If someone is talking about a village or a house, it has to be someone's village, someone's house.

One cannot talk in isolation about a house or a village, and that shows how the community is actually attached to its village or its house, how these things cannot be alienated from the individuals. So, these are inalienable. So, you can look or search little bit and look about 'alienable' and 'inalienable' objects. So, those are again there. Then in the grammar also, we see the reflections of the world view, because it is a program of one's mental activity, the determinant of one's mental structure.

Grammar is not only a collection of rules ,which you actually learn and use in your language. In fact, when we acquire a language, we do not even learn the grammar. So, you cannot ask a child of 3 years to tell you the grammar, but generally, a 3 years child can easily speak the language properly, her or his native language. The grammar actually also reflects the world view; like use of honorifics in some Indian languages, you will see that. And our perception is like that, when we meet someone elder, we generally use the

honorific pronouns or honorific terms in Indian languages to address the person.

But in English, there is only "you". That does not mean that if "you" is used, it does show any honor to the person, but in Indian languages, we cannot use the minus honorific term with the elders. Generally, we do not do that. And if we do that, that might be offensive because that is how our language is there and it has become part of our brain. So, if I meet someone elder to me for the first time and then, I do not use the honorific term, that person might feel very offended, might feel that I am trying to insult the person, but actually there is nothing like that. If I talk in English, "you" is fine, but when I am shifting to Indian languages, since our language shapes our perception, in that way, if the honorific term is not used in the appropriate instance, then one might feel offended.

So, there is that relation of thinking how or what term is being used with "you". So, to support the hypothesis, Sapir and Whorf mentioned some examples, one of them is the word "snow". So, Wolf said that most humans have the same word to describe "melting snow" and all snow objects. So, you can think about how many words do you use for "snow" in your native language. So, there can be snowfall, there can be some ice cube type of thing falling while it is raining, hail.

There can be snow or ice in your refrigerator. So, how what are the words used? So, in Eskimo tribe, there are different words for different types of snow and they can also perceive the difference. For us, every snow might look the same. It is white and snowy and all, but for them, different snow have different names and they can also look at the differences. Even in Indonesia, which has a variety of bananas, the term 'banana' is there, as there are various terms for different types of banana, which is not there in other communities, where we do not find different types of banana. Like in English, we have only one term 'banana', we can use like ripe or rotten, but these are adjectives to describe the word 'banana'.

But in Indonesian, you can find that there are different terms, which are describing different type of bananas. So now, I will give you one example from my field. These are the pictures of Mahali community people; they make baskets. They are also known as bamboo basket makers. So, you can see that there are different types of baskets, smaller baskets, huge baskets and then, they are weaving the baskets.

So now, for English, if I want to say I will say big basket, small basket. So basically, I am using the term 'basket', but for all these different items, they have different names. Now for the bamboos, which we look at they are using to weave, when they are in not in a form of a basket, they are using it as a raw material, all the bamboos to me look the same, but then they have different words for different types of bamboo. So, I cannot

identify them. So, if they ask me to differentiate between all these, it will be difficult for me to do because I am not accustomed to that community.

I do not know. But their children, even the smaller ones, can also easily identify the difference between each type of bamboos, which is reflected in their language. So, you can see there are various terms. So, the terms are written in IPA. So, all these are there. So, you can see bamboo, a type of bamboo used to make poles, type of bamboo used to make

So, a type of bamboo used to make pole and a type of bamboo used to make basket and the thick bamboo and the thin bamboo, raw bamboo, they are different types of bamboo. So, all of them if are kept together, I might not identify the difference between them. and because there are no terms also in my language. So, neither can I differentiate nor can I express it with using different terms, but since their community or their environment has it, they can identify, they can perceive the differences between different types of bamboos and at the same time, they can express it with different types of words. So, what we see here is that, what is present in the geography, they can actually perceive it, they can differentiate between different types of bamboos.

And at the same time, their language supports it by where they have different terms to name each of the item. They can easily identify and talk about it using the appropriate term. So now, I would like to conclude by saying that Sapir-Whorf hypothesis mentions how language and world view are correlated, how actually one influences the other. This can be ideally seen in the domain of color. So, some works have been done to test this hypothesis to have some empirical data about it.

So, it was seen that, in color, it can be easily understood because you know that when we talk about changing colors, colors are always in continuum. So sometimes, one color can be blue for a particular community, but the same color can be denoted as green by the other community. So, the change in color and the perception is there and which can be easily looked at or studied. So, every community does not have only seven colors in their rainbow, there are nine different words for the color blue in Maya. You can see as I mentioned that, in some communities, they can perceive 14 different colors in a rainbow.

So, we have 7 terms and we can perceive 7 colors. So, if you ask me to differentiate or talk about the 14 colors, which are present in a rainbow, neither can I perceive 14 colors in a rainbow, nor can I talk about it. But in many languages, people do perceive it and they have the names for all those. Like in Maya, they have 9 different names for the different shades of blue. So, you can see how they can perceive different shades of blue. Maybe for us, it will not be possible to perceive 9 different shades of the same color blue.

Maximum we can say dark blue, light blue, things like that, but to say or talk about 9 different shades might be little difficult for us. So, through language documentation, we aim to capture the world view which is specific to the speech community. So, it is not like language and world view and environment all are not related, they are very very closely related and that is why, it is very important for us to look or to try to capture the world view through the language. So, when we are documenting a language, we are not only documenting certain terms, certain grammatical portion of it or certain metalinguistic practices, we are also trying to look at the world view; how do the community perceive the world. It can be done by documenting one aspect of the language, by documenting the whole language. or

Of course, it can be done by just focusing on one aspect maybe like color terms, kinship terms, food items. So, when we talk about kinship terms, in Great Andamanis languages, they also have a word for those persons who have lost their siblings. So, when we talk about someone who has lost her husband, there is a word for it, like widow, children who have lost their parents, we have words, like orphan. So, we have words for certain kinship terms where there is a loss related, but generally, we do not find words where "siblings lost" is actually represented through a word.

So, like a widow or widower or orphan. There are also words like when someone loses his or her sister or brother, then also there is a word to denote it. You can look at Abbi's Great Andamanis work to look more into it. So, this example is from there. What she mentions is that, there is also word for someone who has lost his brother or sister. So, this also shows how actually one is very very close to the sibling or how important this loss is looked upon by the society.

Like someone's loss of a partner is looked upon, in the similar way, loss of a sibling is also looked like that. So, it is given that much of importance by the society and that is why, it is also reflected in the language with the form of a word. So, that is what it was about

Sapir-Whorf hypothesis.

Please go through these references. I hope you enjoyed today's class. Thank you!