Language and Mind
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Module – 01
Lecture - 02
How do we learn language?

Last time we saw what language is about. We merely started discussing language. We discussed language as one of the most sophisticated products of human mind. And, we also discussed, language is not just a medium of communication, it is not just a tool of communication, it is a system by itself. And then, finally, we looked at how many languages we speak and how many languages are spoken around us.

We will move forward in our discussions on language. Today we will look at how do we learn language? What happens to us as humans that we start speaking? We will examine this, and we will see how it works.

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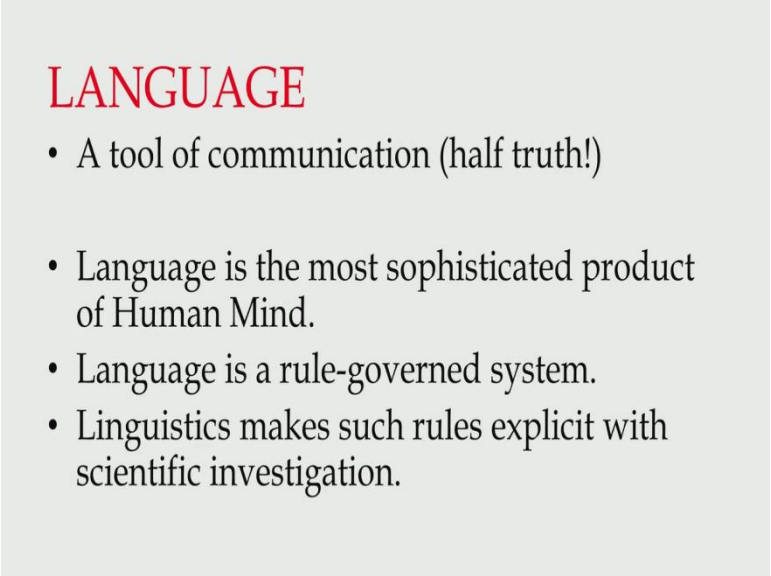

The system, the domain that studies things about language is called Linguistics. Linguistics has contributed a lot to our understanding of language. With such efforts, with efforts from linguists, we have come to know that language is a rule governed system. There are underlying rules that govern language. There is a role of these underlying rules in learning language. We will be looking at them as well.

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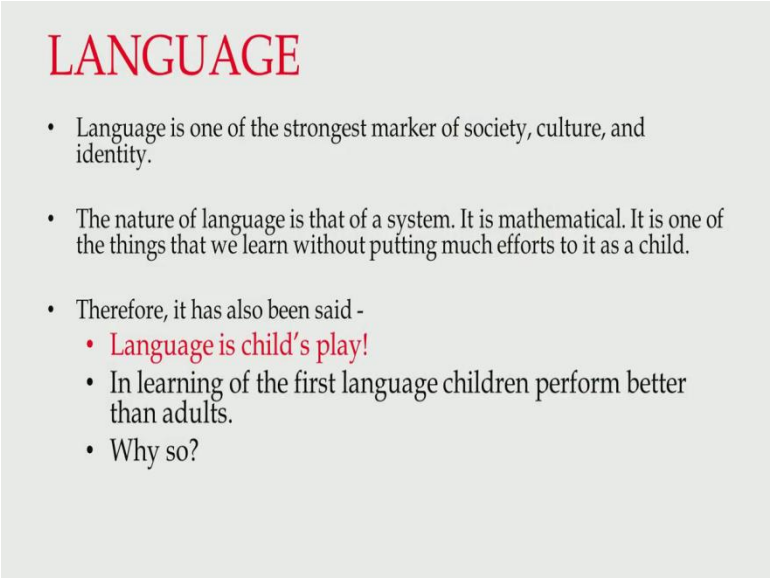

Language happens to be one of the strongest markers of our society, culture, and our identity; we know this. This has a role in language learning as well. This is an external part of language but undoubtedly it has a role in language learning. We will see how this role, how this plays a role in learning of a language.

The nature of language is that of a system because the rules are highly mathematical in nature. Children learn language without putting any efforts. Therefore, it has also been said that language learning is a child's play. In learning a first language, children perform much better than adults. Why would that happen and how would that happen? Let us understand this. When we start learning language, we do not even realize. Therefore, we can say it is automatic.

And, language is the only kind of learning that happens to us where children perform better than adults. We will examine this in bigger details later. But, to give you these few examples, take a look at the following. When we learn to ride a bicycle, we learn it better when we are grown up, when we are old enough; when we learn to fly planes we need to be grown up, we need to be old enough. Singing, dancing, swimming, all kinds of learning requires us to be grown up; whereas, language has no such requirement.

In fact, if we start learning language when we grow up, that is, if we start language learning little later, that is around 5 or 10 years of our age, probably we would not perform the way we do when we learn language as children. Let me backtrack and make another statement, tell you something more. When we say language learning is automatic

we also mean that it is not for us to regulate language learning. It is not possible that we do not learn language. It happens automatically. And, we will be looking at this as well.

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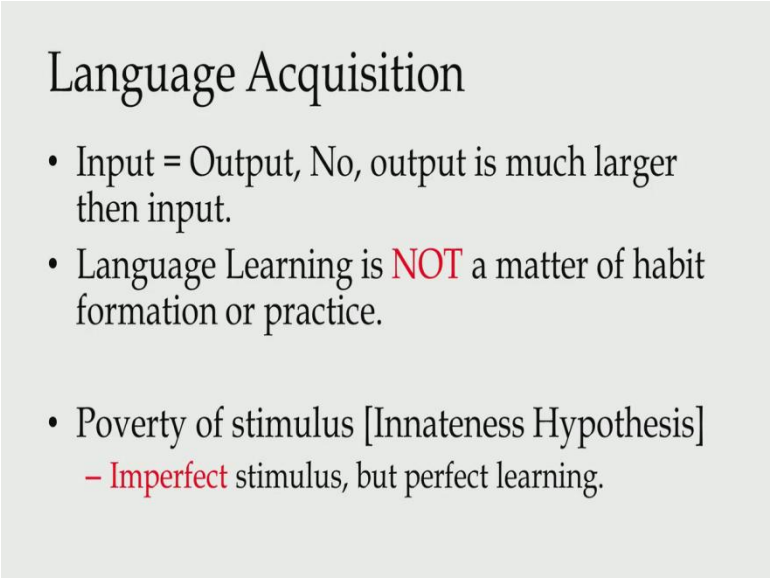

How does it really work? When it comes to first language learning, we use two terms - learning and acquisition interchangeably because initial language learning is actually acquisition. We acquire language but we use the term, two terms interchangeably. Let me ask you a question. When we learn a language, we take, we hear language from others. That is called input. Is input proportionate to output?

Let me define input and output again. What we hear from others works as input and what we speak in response is output. As a child when we learn language, the output is much larger than input. In fact input is very insufficient, fuzzy; and not really coherent, conducive for a child to learn language. Now, pause here for a moment and think that with fuzzy, insufficient, incoherent input, how did it happen that a child becomes linguistically adult at the age of 4 and starts producing language which is highly rule governed? This is the point where we see the role of human mind in real sense. Without the role of human mind in learning language, this would not happen.

Until very recently, that is in the first half of the twentieth century, people seriously believed that language learning is a matter of habit formation. That is, we hear from others, we repeat what we hear, and therefore we learn. In short, that is not true, that is not how it works, that is not what happens. Imagine what would happen if learning

worked that way? If we learn only what we hear, then we do not speak what we do not hear.

Contrary to that, what happens is we have capacity to speak what we have never heard before. We have capacity to produce new sentences without thinking. We know many things about our language that we may not have ever heard before. These things happen automatically on the basis of insufficient, incoherent and fuzzy input. That is, insufficient, fuzzy, and incoherent input is processed in human mind; and the output is coherent, rule governed and clear sentences.

I used the term linguistically adult. I would like to clarify that to you. What we mean is, at the age of 4 or 5, a child is able to come up with a rule governed, acceptable grammatical sentence. Such a capacity is called… with such a capacity, we call a child linguistically adult. Now, we will look at it in a more coherent fashion.

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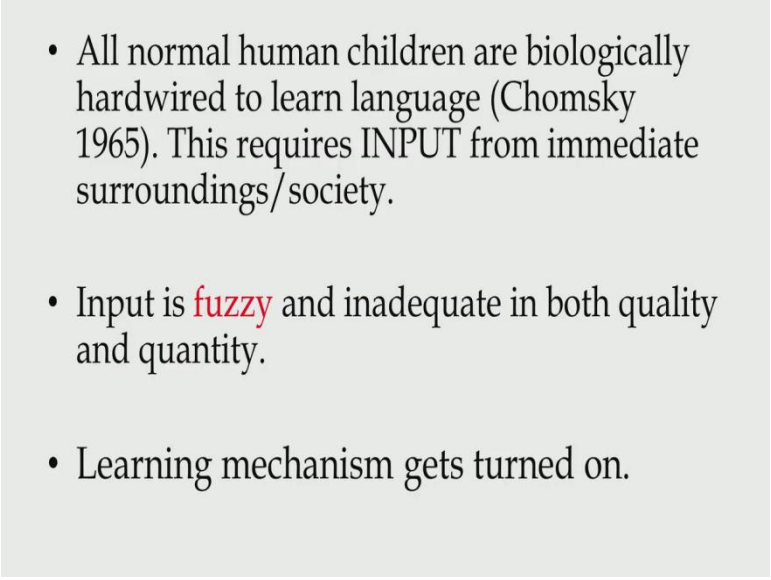

Like I said, until the first half of the twentieth century, people believed language learning is basically a matter of habit formation. That is, and I also said that is not true. This became more apparent with the findings of a very famous linguist Noam Chomsky, in 1957. In 1957, Noam Chomsky came up, and for the first time claimed, that all human children, that is all normal human children at the time of their birth are hardwired with the capacity to learn language.

It does not happen, it would not happen that a child is born, a child is normal and the child would not learn a language, the child would not end up speaking a language. Having observed such a thing, probably Chomsky made such an emphatic statement, such an emphatic claim that all human children are hardwired with the capacity to learn language. This is also known as innateness hypothesis.

I have just discussed with you that this, such a capacity, a child is born with such a capacity; but it requires more than that. It requires input and the input comes from society. Remember, when we made a statement about society, that language is a phenomena in real world, language is a phenomena in society. It is a marker of our identity; it is a marker of culture and society. We take up society and we take up only little bit from society for the purpose of our understanding. right now, at this time, that the place where input comes from is called society.

Now, what would be society for a child who is learning language, who is very little? From the time of birth, everything around a child is its society and the input comes from only that. So, what is being spoken around a child is called input; and, everybody around the child is society. Naturally, it is very small in the beginning; that is couple of individuals, then the family, and then it keeps expanding. However, what is worth noticing is the society remains very small for a child until 3 to 4 years of age. Of course, that happens relatively.

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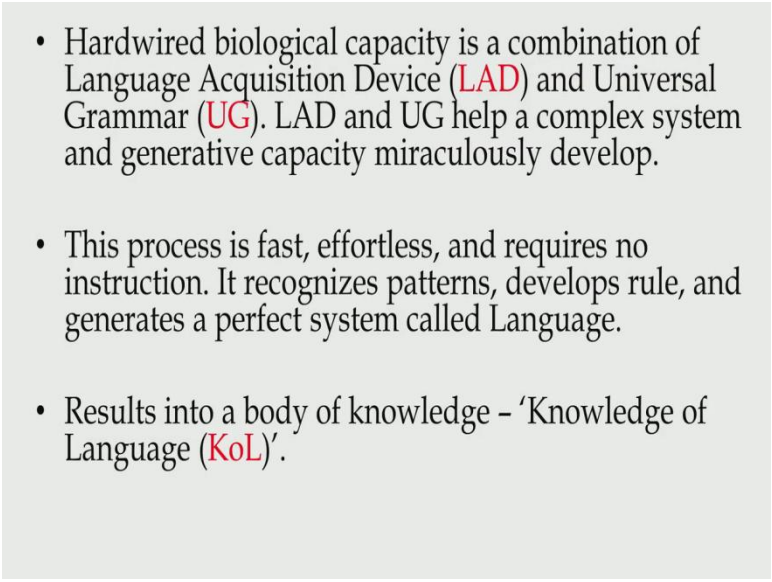

Hardwired biological capacity is a combination of two things – one, language acquisition device and universal grammar. Language acquisition device and universal grammar help a complex system and generative capacity miraculously develop. Let us spell it out. When Chomsky proposed that every normal human child is born with the capacity to acquire language, is hardwired with the capacity to acquire language, he meant two things - there are 2 parts of that - that is, a child is born with a hypothetical device called language acquisition device. In short, it is also called LAD.

That device has universal grammar inbuilt in it. That is, a universal grammar…. Let us understand what universal grammar is, in short. We also call universal grammar - UG. What is it? Universal grammar is basically common principles and parameters of language. Common principles are common, all, common among all languages. Languages are similar to one another on the basis of these principles. And, languages differ from one another on the basis of parameters. So, language… so, universal grammar has 2 parts - principles and parameters; whereas, universal grammar itself is part of language acquisition device.

Now, backtrack a little bit and see. Language acquisition device is given to us by birth. We have the capacity; which means we have common principles of language and parameters along the lines which languages differ, already inbuilt in us. It is just that these are inactivated; they remain dormant. And, we are born with this capacity. That is the hypothesis which came up in 1957, and Noam Chomsky continued developing these things. And the domain of such a hypothesis is also called generative apparatus, generative grammar, generative approach – we will keep using these terms interchangeably. Why generative? I will explain that to you too.

Before we look at generative grammar, we want to look at one more aspect. On the basis of universal grammar, language acquisition device and the innateness hypothesis, we come to a point where, in the process of learning, we uncover knowledge of language. Knowledge of language is a technical term which encodes our learning of language.

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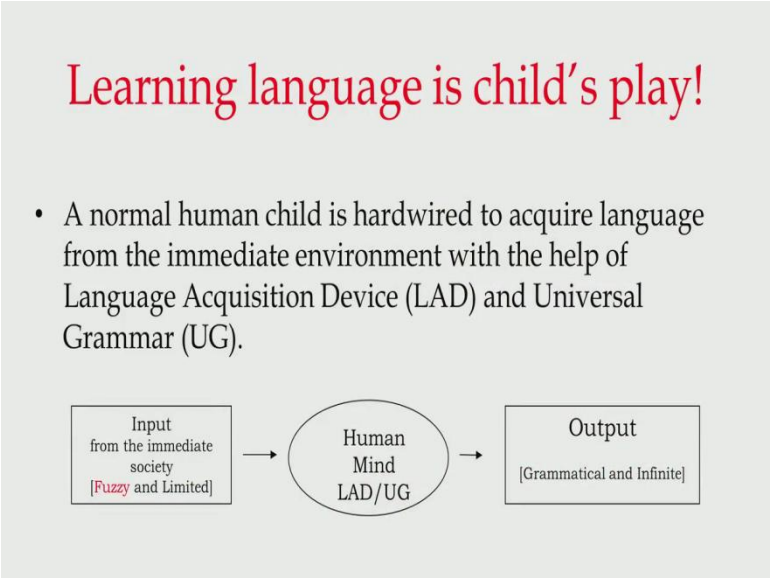

Why do we call it a child's play, finally? We will summarize that. See the slide on this screen. This will help you summarize many things that we have said so far. We have human mind in the centre of it which has language acquisition device and universal grammar inbuilt in it. It requires input from the society, of course, that society is immediate society for a child, and then we get output.

The nature of input is really fuzzy and limited. By limited we mean insufficient, incoherent. Fuzzy is unclear in the sense that it is not meant for us learning language; that is, it is not given to mean learning language. It is just spoken around a child and the human mind starts decoding. And, that capacity which allows human mind to decode and extract rules from what is being said around is called generative capacity. Therefore, now we understand what generative capacity is about, now we understand what generative grammar is about.

Hear me out once again. Language generative capacity helps human child uncover rules that is underlying in what is being told to us, what we hear. These rules are at all different levels - that is at the level of sounds, at the level of words, at the level of sentences, and so on. We will be looking at those rules and we will be looking at how we uncover those rules as well.

But, keep in mind that this happens to child automatically. This happens to us when we were, this happened to us when we were children, automatically. There was no effort that either we made or our society made for us to learn language. This is what we mean when

we say, when we use the term automatic. When we say language learning is automatic, we mean we make no efforts for that. When we say language learning is child's play, we actually mean it is very easy for children to learn language.

We will come to this - why is it easy for children to learn language? But, for the time being we need to understand that learning language is different from other kinds of learning that we mentioned in the beginning - such as learning to swim, to sing, to ride a bicycle, to fly planes - to do all kinds of activities that we do when we grow up. However, learning to speak is intrinsic, innate.

Thank you.