

**Language and Mind**  
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**Module - 01**  
**Lecture - 03**  
**Learning Language**

Let us continue our discussions with language learning. Once again, I will repeat, for the purpose of learning language as a child, the term learning and acquisition can be used interchangeably. So, we can say learning language or acquiring language, they mean the same thing for this purpose. So, what have we done so far?

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Language

- A **unique** capacity of humans
- A **sophisticated product** of human mind
- A **rule governed** system
  
- Different from all other types of learning
- Language is **special purpose** cognitive ability.
- **Language learning is child's play!**

We have looked at language and then we have been trying to understand how learning works. Out of several things that we have discussed about language, there are three key things which we should keep in mind. First, language is a unique human capacity. It is unique, because language is the only thing which makes human distinct from many other species. Language is really a sophisticated product of human mind.

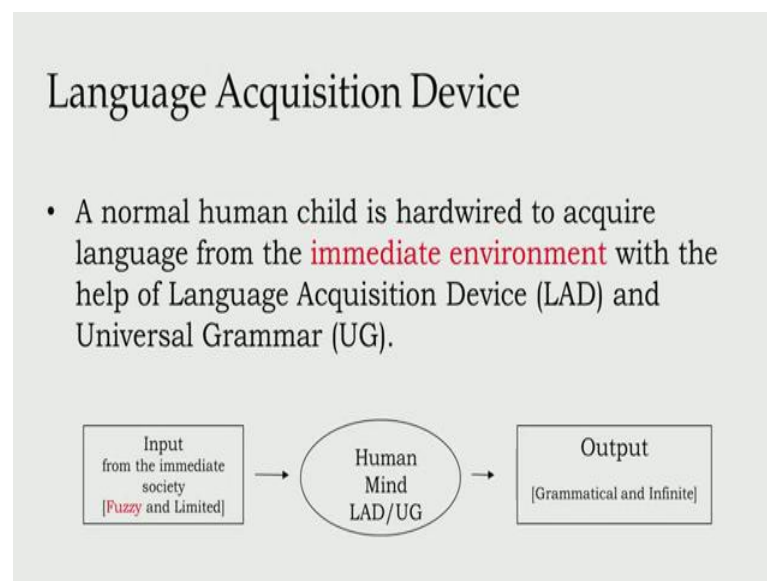
What do we mean by sophisticated product? We mean that it is really a rule governed system. There are several underlying rules that operate in language. We will be coming to those rules; hence those rules will help us understand a lot about connection between language and human mind. Language being rule governed system is what helps us also understand functioning of human mind. We will, through the developments in the study

of language which is linguistics basically; we are looking at this structure of language, we are looking at the underlying rules of language to understand how human mind really works.

So, we will be looking at these two things back and forth. What we also saw so far that language or learning of language is really different from all other kinds of learning such as singing, swimming, dancing, flying, cycling, etcetera. Particularly because, we need to be grown up for other kinds of learning whereas, it works exactly the opposite; we do not perform too well, if we are grown up, for the purpose of language learning.

Therefore, it is easy for us to say the two following things: language is a special purpose cognition and language learning is really a child's play. This is what we have seen so far. We started looking at the process involved in language learning as well yesterday; we will revise it a bit before we move further.

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We said a normal human child already has the capacity at the time of birth to acquire language. However, what is critical for the child is the immediate surroundings. So, the input comes from immediate surrounding and input interacts with already inbuilt capacity and this inbuilt capacity has two parts. This inbuilt capacity is called language acquisition device which has universal grammar inbuilt in it.

Now, so around human mind, language acquisition device and universal grammar, we need input and what we get is output as part of learning. This is the process involved in language learning. We will be looking at in details, what you see in this circle human mind; that is, what is it that happens inside this. What is it that happens in the process of very limited, very small and very fuzzy input and these things get processed and we get grammatically and finite output at the age of four.

So, the key puzzle here is something happens inside human mind. The way human mind processes input that it receives is really critical for us to uncover in order to understand how it works, how learning of language works, how human mind works and also it helps us understand more about language. So, we will be looking at those things and in fact, this is what we intend to do throughout the course.

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- With the help of inbuilt Language Acquisition Device (LAD), a complex system and generative capacity miraculously develops.
- This process is fast, effortless, and requires no instruction. It recognizes patterns, develops rule, and generates a perfect system called Language.
- Results into a body of knowledge - 'Knowledge of Language (KoL)'.

Let us look at little bit more with what happens in human mind, so here is what we do with that. So, language acquisition device is a complex system and it helps... language acquisition device miraculously develops generative capacity. The input that we receive is processed with generative capacity that human mind is already enabled for; this generative capacity is responsible for learning language. This generative capacity is responsible for uncovering underlying rules of language. It is critical, it is important for us to keep in mind that this process is fast, very fast; this happens in no time.

We will spend considerable amount of time in understanding this fast, speed. We will be looking at the examples and stages in the process of language learning next time. It is effortless, it is fast, because it happens before 4 years of age. 4 years of age is absolutely no time and a child has already uncovered the rules of language that is operating in the language that a child speaks.

It is effortless, because nobody has given tuition to the child, not even input is given in the form of help for language learning and basically, that means, it requires no instruction. What it does is human mind recognizes patterns, develop rules and generates a perfect system called language. This is why we call language a rule governed system, a perfect system, a sophisticated product of human mind. With all that, what we get as a result is a huge body of knowledge and this knowledge is called knowledge of language. Let me give you an example of it.

If a child says John likes pizza, the child knows the difference between like and likes. What operates between the distinction, what creates the distinction between the two sentences, is pretty obvious to the child. Ram khana khaha hai. In this Hindi sentence, Ram as a noun and its properties are clear to a child; it gets manifested on agreement patterns of the sentence. Khana khaha hai is the predicate of the sentence and that has masculine gender, singular number and third person reflection on it.

Now, these are the things that automatically come when a child develops this capacity called language. But, what happens is, this is an underlying tacit knowledge and this becomes part of what we call knowledge of language. To take another example, rather little simpler, is the following. If we speak a language, let us say Hindi or Tamil or Telugu, English, we have the capacity of this language in the following sense.

We know all the words of that language. It sounds little bit too much to claim. However, if you look at the following, it will make more sense. Suppose I speak Hindi. If I am given a word and I am asked to make a decision whether the word belongs to Hindi or not, it takes me absolutely no time in making the decision, whether the word belongs to Hindi or not. It does not mean that I remember all the words of Hindi. If I am given a notebook to write all the words of Hindi, probably I will not be able to do so.

I would not be able to write more than 100 or 200 words at a time, maybe 200 is also too big a number. However, I am given a word to make a judgment about it; whether the

word belongs to my language or not, I take almost no time. Now, what is going on? And my judgment is almost accurate, is fully accurate rather. So, here is what comes out of this mathematics. Actually I am scanning the word through the lexicon of the language that is inbuilt in my mind and I find that this word does not belong to the language that I speak.

This judgment comes out of my knowledge of language and this knowledge, whether a word belongs to my language or not, is really a tacit knowledge and this becomes part of what we say knowledge of language. We can go on and on and look for more examples. Take one more to conclude this part of knowledge of language. We will look at it little bit more little later, but let us take one more example. Gender plays a very crucial role in agreement in a language like Hindi; therefore, it is called grammatical gender.

What we mean by grammatical gender is following. The gender of a noun shows up on the verb in every sentence.

Ramkhana khatha hai., Sita khana khathi hai - the gender of Ram and Sita in these two sentences show up on the verb predicate khana khathi hai . In the case of sentence one, Ram khana khatha hai Ram, masculine gender shows up on the predicate in khana khatha hai ,whereas, feminine gender of Sita in second sentence, Sita khana khathi hai shows up on the predicate as well.

Now, this is the question of natural gender; however, all the nouns must have a gender assigned in Hindi. For example, Kithab has feminine gender on it, Kurzi has a feminine gender on it, Kamara has a masculine gender on it. Now, this is part of our tacit knowledge - that a Hindi speaker knows the gender of a noun very well. There is absolutely no hesitation and very widely, most of the time, this happens to be true; of course, with little bit variation. We will look at the variation part some other time.

So, most of the people will come up with this decision that the gender of Kithab] is feminine, the gender of Kurzi is also feminine, the gender of Kamara is masculine. We will hardly have a disagreement on this. Now, how do we know the gender of Kamara as masculine? This is part of knowledge of language. The shared knowledge across the speakers of the language is part of knowledge of language. So, hopefully these three examples will make it clear, will make knowledge of language clear.

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## Universal Grammar

- “UG consists of a set of innate, abstract, linguistic principles which govern what is possible in human language” (Larsen-Freeman & Long, p. 230).
- Principles cluster around “parameters” – sets of properties of a language that vary in certain restricted ways.

Let us look at universal grammar for a moment. We have used this term yesterday; we are using this term again. We will continue using the term because it requires clarity in our understanding. Universal grammar consists of a set of innate and abstract linguistic principles. These principles govern what is possible in language that an individual speaks. In short, what is possible in language is governed by principles and parameters govern how languages vary from one another.

In other words, parameters are set of properties of a language that vary in certain restricted ways. What is this supposed to give us? Let us look at examples. All languages will have sentences. This is part of principle. All sentences will have a subject and a predicate; this is part of principle. All languages will have nouns; this is part of principle; whereas, arrangement of words in a sentence will vary from language to language.

For some language, for example, verbs occur in the middle of a sentence. For a language like English, verbs occur in the middle of a sentence. For example, John likes pizza - the verb like is in the middle of a sentence, which means, John is a subject, verb like and pizza object; verb precedes the object; whereas, in a language like Hindi, we will take sentences that we have used before Ram khana khatha hai, the verb [khatha hai] is the final constituent of the sentence.

So, Hindi could be a verb final language and English is a verb middle language. Now, Hindi is verb final and English is verb middle - is dependent on the arrangement of

words in Hindi, arrangement of words in these two languages. Whereas, both the languages will definitely need predicate, both the languages will definitely need subjects and both the languages will have sentences as part of principles. We will elaborate this thing little later as well.

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## Knowledge of Language

- Knowledge of Language grows in human mind.
- KoL consists of the **underlying rules that we know but we do not know that we know them.**
- These underlying rules help generative mechanism of a native speaker speak unheard of sentences and enable them separate grammatical sentences from ungrammatical ones.

What we have just looked at - knowledge of language, and to once again give you a comprehensive summary of it, this is a set of underlying rules that and the good part is that it is a particular kind of knowledge that we have. We know... this is about knowing and we try to understand know in a particular way here; we know the rules, but we do not know that we know them; this is specific about knowledge of language.

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- Linguistic computation and human cognition uses socio-culturally grounded context.
- The knowledge of language that grows in human mind is not an out come of **stimulus response**; rather it (KoL) is part of generative apparatus as a special kind of cognitive ability.
- KoL has got serious consequences for Language (second) Teaching/Learning and defining language as multilinguality on a continuum.

Now, to give it a little bit more comprehensive summary of how language learning works, is the following. The generative apparatus that we have just discussed helps us uncover the rules of language and come up with well formed rule governed sentences. This is called linguistic computation. This computation works in human mind. And what we said about input little earlier and last time that input has to come from immediate society, immediate environment of the learner, in this case, children, has to be socio-culturally grounded and input from, such kind of input helps us learn language.

And on the basis of that, the body of knowledge that develops is not really, because of stimulus response. We have discussed this part little bit; we will underline this thing again. Input is not proportionate to output in the process of learning Input is not proportionate to output, input is way smaller and output is much bigger. Therefore, we have said, the input is restrictive in nature, input is limited and output is enormous, infinite.

Now, the theory which believes in stimulus response will predict something completely different. For that if, input... basically that, such a theory predicts that, input and output are proportionate; that is, output is going to be proportionate to input, which is not the case in language learning. A little bit of observation will reveal this fact with clarity.



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## Relevance

- How humans begin to speak?
- How are humans different from animals?
- Are languages way too different from one another?
- How do we account for multilinguality?

So, to summarize again for today what we have done, we are looking at language learning and we want to conclude with the following for today. We have used several terms such as knowledge of language, universal grammar, language acquisition device, generative apparatus; these are the critical terms for us to remember. Language is a rule governed system; we need to understand this. Learning of language takes place with input from immediate society.

But, the processing of that input with the inbuilt generative capacity of human mind is fundamental for what we speak; this is very critical for our understanding of how language is learnt. And therefore, we know, we keep on saying so far that learning is really a child's play. This type of learning takes place without us realizing what is happening in the human mind; therefore, we call it effortless; therefore, we call it automatic.

Thank you.