Fundamentals of language Acquisition

Prof. BIDISHA SOM

Dept. of HSS

IIT Guwahati

Week 10

Lecture 049

Lec 49: Turn taking

Welcome back. We are in module 10; we are talking about the conversational skills that children acquire slightly later than the grammatical skills. So far, we have discussed various aspects of communication skills, including implicatures, scalar implicature, and other types. So, today we will start with yet another important aspect of communication, which is called turn-taking. Now, turn-taking is an important aspect of communication in any kind of conversation. You need to determine whether it is a two-part, dyadic conversation or a multi-party conversation; depending on the topic and the people involved, there are certain patterns of turn-taking that are part and parcel of any kind of successful communication.

So this is not arbitrary; it depends on various factors. So primarily, there are certain things that you need to keep in mind when engaging in any conversation, which are to keep the conversation flow intact. And also, you should not stray too far from the main topic of conversation, and so on. And along with that, there are certain cultural, culture-specific aspects of turn-taking as well.

So, we will see some of them, how children acquire them, and what the problems are. So, turn-taking is not arbitrary; it follows certain rules; these are culture-specific, as I mentioned. So, as a result of children's need to learn a few specific properties of conversation, in this regard. What are those? Primarily three. So, first and foremost, paying attention to the topic means that if they are participating in a conversation, they

should not come in with a completely different topic or agenda of their own; rather, they have to stick to the topic of the conversation at that given point in time.

So, in order for them to make any kind of meaningful contribution to a conversation, they need to pay attention to the topic. Secondly, planning the utterance in a way that keeps the conversation going is important. This is connected. So, all these three features are connected to each other. You cannot simply say whatever comes to your mind.

You also have to plan beforehand before you interject and give your contribution. So, the contribution has to be meaningful. Remember, we discussed Grice's maxims. So, keeping those things in mind, we are looking at the points. So, plan the utterance in a way that keeps the conversation going rather than stopping it.

Similarly, ensure that the utterance is both informative and relevant. So, these are the three primary factors on the basis of which children need to learn how to contribute to ongoing conversations. What are the ways in which we can assess these abilities in children? There are many types of points of departure to consider. So, one way to assess is to check whether they are able to offer pertinent information when asked or when they interject something into an ongoing conversation. So, it can be both ways: you can ask the child to contribute, or you can just, you know, interject something into the ongoing conversation.

Both ways, you can check whether they are able to contribute meaningfully to a conversation, keeping in mind that turn-taking is an important variable. So, this skill as a result has been studied from multiple perspectives. For example, answering parental questions about whether they can provide pertinent information when asked. So, when the parents or any other caregiver, or whoever they are, are engaged in conversation, if they are giving the answers properly and also getting responses to the child's contributions. Similarly, joining in conversations among other family members and contributing to conversations between parents and an older sibling.

So, these are some hypothetical scenarios in which children might engage in conversation or in a communication setup of various types. So, either they can be asked a question, or they can join in on their own. And when they join in, there can be multiple types of conversations, maybe with other family members themselves, and sometimes the parents and older siblings are discussing while the younger child joins in, whether they come in with relevant information and wait for their turn, and so on. So what do the research findings point to? This primarily suggests that conversational turn-taking starts at birth. Remember, we talked about the primitives of conversation or proto-conversation skills that develop very early in life.

So, this is one of the main findings with respect to this domain as well. So, in the beginning, during the first few months, adults govern the conversation because they are the ones talking; the children are infants; they are very small and very young. So, they cannot contribute through their verbal output. So, primarily, the parent is the person who talks. So, one of the first studies we have referred to in this domain analyzed videos of two mothers interacting with their infants from three months of age, which is very, very early for such young children, and the mothers were conversing with the children.

So, what they found out was that although the mothers were the only ones talking, they commented on each output, whatever the output might be; it might be just some vocalization that at that moment probably did not have much meaning, any smile, burp, and so on. So, whatever the child is doing, the mother takes it as input for the conversation and replies to it. So, she gives a response to it. So, thereby creating some sort of conversation, a proto conversation. So, these are the first few steps, the first few important stages toward creating a sense of conversation in terms of setting the pattern for turn-taking because each time the child has any kind of response, the mother takes it as her turn to speak.

So, this is understood to create the foundation for later practices of turn-taking in a conversation. Much later, in 2005, there were some interesting studies; one of them looked at German mothers with their infants from 1 month to 3 months of age, and what they found was that initially, in the first month, the mothers seemed to be simply establishing contact with the infants by using simple sentences because that was the first month of their lives. So, Mother is simply creating a bond, creating a foundation for the conversation, and so on. Gradually, they incorporate longer sentences with more complexity and diversity of words, which is understandable; however, this is an empirical study to verify that mothers do not start with complex sentences or with a lot of vocabulary in the initial stages. Initially, they simply stick to very simple foundational sentences.

By 3 months, mothers are already engaging in turn-taking, treating the child as a partner in conversation. So, this ratifies the earlier findings. Now, with this, we know that infants already engage in turn-taking from the very beginning of their lives: 1 month, 2 months, 3 months. So, they are already able to understand their turn, or at least their parents convey that kind of sense to them. We kind of take it that they understand they are learning to engage in turn-taking of some sort.

Now, given that factor, it should be expected that when they grow up, they will be doing

very well in turn-taking in a conversation, and in fact, some studies actually support that children, even at 2 years old, are capable of relevant and appropriate contributions in conversation with a caregiver. So, many studies have looked into this, but one of the most important problems is that most of these studies looked at conversations with a parent. Now, when the child is 2 years old and talking with their parent, the conversation will be more or less smooth because, as a parent, they will tolerate a lot of mistakes. So, even when the children are not participating in the exact way they are supposed to, parents do not really mind. So, they ignore it, and the conversation continues, thereby giving it the appearance of a smooth exchange.

So, the tolerance for mistakes is much higher when the conversation is with parents; hence, it may not be a very good indicator of the child's ability to take turns. Now, findings from multiparty conversations provide contrary evidence because the tolerance level that parents have may not always be present in a multiparty conversation. So, in those cases, we find opposite results; we find contrary results. For example, one influential study reported that young children's turns are often irrelevant, off-topic, and ignored. So, this is a case where it is not only the parents, but there are other people, and in such cases, children do not really contribute in the proper way to conversations.

So, they also found that 2-year-olds were less successful in trying to join the conversation between their mothers and older siblings. Approximately 50 percent of the intrusions were irrelevant, which is more than half. So, that is a good indicator. The turn-taking is, so what is the takeaway lesson here? The take-home lesson is that when they are conversing one-on-one in a dyadic conversation with parents, they seem to do well because parents have a higher threshold for tolerance of mistakes, but in multiparty conversations, they do not seem to do as well. Another important aspect of conversation is the idea of timing.

Timing is like taking your turn. So, one person has already spoken, the other person has to come in, and the way you will join in is when you should join. So, typically in adult conversation, the gap between turns is 250 milliseconds, which is very low. 250 milliseconds is what we typically find in adult speech and conversations. But the studies have found that in the case of conversations with 3-year-olds, like small children, the gap is much longer: this is 1.5 seconds, which means 1500 milliseconds. So, you can see the gap is much larger compared to adult conversations. Now this means that they actually wait for a longer time, which means they are not able to time their contributions in a conversation properly. So, this means that they are unable to anticipate the gap. So, in a multiparty conversation, children have been found to have serious difficulties with the precise timing of their self-selections.

So, when they are in cases of not only dyadic conversation but also multiparty conversations, they have been found to have serious difficulties in anticipating and giving timely interventions. Similarly, institutional procedures of turn-taking, like in school, are different in terms of when they happen at home with parents; they occur in an informal situation with a multiparty conversational setting, and similarly, you have yet another kind, which is the institutional kind. So, in a school setting, for example, the conversation will also happen among people who are, let us say, not close to the child. In those cases, there have also been a lot of studies, and similar kinds of difficulties have been found with respect to younger children, who find it difficult to map the timing in order to anticipate the timing to contribute, keeping in mind the timing, and so on. So, typically, children have problems planning their turn in the conversation.

So, as a result, by the time they actually contribute, the topic might have shifted. So, in a conversation, what happens is that you start with a topic and then gradually build up. So, let us say the child was expected to answer 2 minutes earlier, and by the time they finally came in, the topic had shifted. So, as a result, many have pointed out that their incorrect contributions are actually a matter of wrong timing rather than incorrect contributions in terms of content. So, simply because the topic has moved by the time they contribute.

So, the previous findings showed that they often have irrelevant contributions. So, that is how you can account for irrelevant contributions, as they might simply be late in contributing. Another important factor in conversation is that children do not seem to master the use of words like these; they are called floor holders. So, by using these, we mean that the conversation is still ongoing.

You can signal multiple things. You are looking for the exact word, a proper word to explain, or you are still arranging your thoughts, or whatever. There are multiple reasons why we use floor holders. But this is typically the fundamental aspect: we intend for the conversation to go on because I have more things to say. So that is why it is called a floor holder. So I am holding on while I come up with the exact sentence, phrase, or word that I want to say.

So, this means that the speaker wants to continue their part of the conversation. Now, in the case of children, they do not seem to get it because they do not yet have an understanding of floor-holder particles. As a result, they often make many mistakes in

conversations with caregivers; this may not really matter much because, as we have already discussed, parents have a higher threshold for tolerance of various kinds of mistakes. But in other cases, they do affect conversational skills, as a result of which the quality of conversation by children also suffers because of this factor. Thus, the idea is that the children, infants, even though they seem to show some indication of turn-taking quite early in life, actually take many years to master it.

So, it is one thing to, you know, contribute by mere vocalization, a mere smile, or a burp, or something like that, but it is completely different to contribute in a meaningful way in a conversation that requires a verbal response, keeping in mind all the maxims of Grice. So, being informative, being relevant, and so on. And then you have to couple it with the variables in a conversation, such as turn-taking, timing, and floor-holding, and so on. So, these things are a combination of all these factors, which take some time for children to master. Then we also have being informative, which is yet another important maxim of Grice.

So, do children's first contributions to conversations make sense? That is another important point. Is it that they only miss the timing, or do they also have proper information to share in the conversation? So, this is judged by how informative their contribution is and is also measured in terms of what can be assumed in the context and what cannot be assumed. So, this is what being informative means: are they giving any information when they contribute, and whether that contribution is already there; can you assume this information from the context, or whether it cannot be, and so on. So, if the child's contribution is about what is not assumed or not certain in the given context, then only it will be considered informative content. Because if the ongoing conversation has already discussed those things, then there is no point in repeating them.

So, if children repeat, then it is not informative; if they do not repeat and give new information, then it is informative. So, for example, the child may or may not possess a toy. Now, when the toy is not in her possession, its identity becomes uncertain in this context. So, in such a case, she has to mention the identity of the object. Remember, we talked about similar ideas regarding the use of nouns versus pronouns.

So, this is something similar to what we are talking about. So, if there is a toy and the context is that it is not in her possession, then the identity is uncertain; but if it is in her possession, then the identity is certain. So, in that case, she has to choose her words accordingly in order to contribute to a conversation. So, on the other hand, if she has the toy, it is undergoing some change; she is more likely to mention the change, not the toy. So, for example, the child had the toy, and now the toy is with somebody else, with his or her mother; then he or she has to talk about that change rather than about the toy.

So, this is what we mean by being informative. Thus, children need to be aware of the least certain aspects of the situation in order to make informed contributions to a conversation. So, these are the technicalities of what we mean by being informative. For an adult, this does not need to be said because we know that the thing that has already been talked about need not be repeated if we want to have a meaningful conversation. What we can talk about is anything that has happened that is new to the entity, not about the entity itself.

So, for children, this is what we are looking at. So, for different stages of their development, this will refer to different aspects. So, in the one-word stage, this will be visible in the naming of the objects they are able to name. As you might have noticed, many of the experiments that we discussed in this course have to do with naming objects. So, this is why we do it. In later stages, in the case of longer utterances, it is noted that children place the known information first and then follow it up with what is new.

So, this idea of what is given and what is new depends on the speaker's understanding of what the hearer knows. This is also something we discussed at the beginning of this module: that any meaningful conversation depends not only on what the speaker knows and understands but also on his or her understanding of what the hearer knows or understands. So, it has to; it is also dependent on a lot of sociocultural meta-knowledge and extra non-linguistic knowledge. Another important factor in conversation is the situation in which it breaks down. So, sometimes conversations do not move forward due to various factors, such as an incorrect contribution, a longer gap, and so on.

So, this is also something that the children need to understand: communication has broken down, and there are some repair methods that are needed. They need to repair it in order to, for example, address the child's expressions that the caregiver or whoever the conversation partner is fails to understand or follow. Then the child has to repeat his or her utterances or make changes to the utterances in such a way that the conversation continues. That means the hearer can understand what he or she is saying. So conversational skills, as a result, also depend on the ability to recognize, locate, and repair   misunderstandings   and   conversational   breakdown.

This is taken for granted in adult conversations, but not so much in conversations with children. However, the finding suggests that children actually become quite adept at repairing communication early in their lives. So, whenever there is a breakdown, they are actually able to repair it in their own way; they do repair it. Interestingly, while we are talking about communication breakdowns, many researchers have pointed out that it is

the point at which a conversation breaks down that can be useful for teaching children certain conversational skills we discussed before. So, the information content, the timing, the turn-taking—all of these actually become, let us say, highlighted when the communication breaks down, when the child realizes, if the child realizes, and when the child realizes this is exactly the point where the child has a window to understand what went wrong and thereby correct themselves.

So, learning about communication breakdowns and repairing them not only teaches individuals how to make themselves understood better but also helps them learn some fundamental aspects of communication. So, there have been many studies on this; one of the studies I have quoted here is about when one- or two-year-olds fail to make themselves understood due to mispronunciation. What they do is their method of repairing is first to try to repeat the utterance. So, typically, they will repeat the part they understand to be problematic. So, they understand that this is where I have failed to convey what I was trying to express; therefore, they repeat.

This has been found even in 1- and 2-year-old children, which is pretty early in life. As young as 1-year-olds reject misinterpretations by adults when they realize that the adult has not got it correct. They have misunderstood the utterance. They are also able to reject even when they are only one year old. One famous study that I have quoted here was conducted by Golinkoff in 1983.

Here, Jordan, who is very young, vocalizes repeatedly until his mother turns around, and then she turns around to look at him, and then Jordan points to an object on the table. Because this is, remember, she is a very young child; the language is not yet developed. So, he is trying to he is vocalizing something and pointing to an object on the table mother then holds up the milk container "do you want this?" Jordan shakes his head "no"; vocalizes again continuing to point, mother holds up a jelly jar "do you want this?" Jordan repeats the action as before. So, every time the mother picks up the wrong object, the child keeps nodding his head to indicate 'no,' his disapproval, and continues to point.

And then a few more such offers and rejections followed. Finally, Mother holds up the sponge. "Do you want this?" Then Jordan leans back in his chair, arms down and relaxed. Ok, finally, she got it. So, this is a stage where he is not yet able to speak; he is one year old. So, through gestures and various other physical kinds of body movement, they finally get what they wanted.

So, they realize that communication has broken down in this case, which is a form of non-verbal communication, and even here the child is able to figure out that communication has broken down and tries to repeat. So, this is often referred to in many of the later studies as an important pointer that even a small child at that age, before he or she has started to speak, can actually understand when the communication breaks down. Obviously, for older children, the strategies will be different because by the time they are able to speak, they will use language. So three-year-olds exhibit an increased repertoire of various kinds of remedial resources. So they will they will use they will deploy and answering request for clarification and then revising their utterances accordingly.

So when they are older, they obviously have language at their disposal, and they will use various kinds of clarification requests, repeating their sentences or rephrasing them when they understand that communication has failed, and so on. In peer interactions, children between 4 and 6 years manifest their growing concern with the smooth running of interactions because by the time they are 4 to 6, they are good at conversation; they are able to have proper conversations among their peers, and that is when they are found to be taking this very seriously and actually focusing on keeping the conversation smooth and using various methods to repair and revise their utterances. Now it is found that children, by the time they are 4 to 6 years old, are quite good at repairing, but there are certain cross-cultural differences in this as well. So why do we need to take into account cross-cultural variation? Because communication as a process is culture-specific. The way you converse, the way speaker and hearer interaction takes place in any given scenario is dependent on the way that particular activity is perceived within a culture.

So, this also takes us to the larger social, what you call it, let us say larger social patterns of behavior. So, you have to put it in that entire background. So, this concerns the speakers' and hearers' responsibilities for securing mutual understanding, which is one domain. So, in a larger socio-cultural backdrop, how people behave within a particular context and within the context of conversation, who has the responsibility for taking the conversation forward, who has the responsibility for making things understood, and so on, is also something on which cultures and societies differ. So, typically in Western societies in Western middle-class contexts, adults' repair initiation serves multiple functions, such as enhancing mutual understanding and implicit socialization procedures.

So, in the case of Western societies, the responsibility lies with the speaker. So, in the case of adult conversation, what do they do when they repair their utterances? They are typically keeping in mind the basic factor of mutual understanding: that the speaker has the responsibility for creating mutual understanding and also for the implicit socializing procedure. So, what is implicit, what is not explicit, and what is just implied? How is the speaker expected to behave in a particular scenario? Keeping all these things in mind,

adult conversations typically use repair strategies by the speaker. So, in this kind of social scenario, when the child is speaking, the same responsibility comes to the child. So, as a result, the child has to give the relevant information, and they have to continuously monitor whether the hearer has understood or not.

Now, this seems like a commonsensical thing, but in certain cultures, it is not exactly so. So, in many non-Western cultures, for example, the Japanese have been studied. So, in the case of the Japanese socializing pattern, there is a concept of intent listenership, because in Japanese society, in the Japanese conversational setup, mutual understanding is attributed to the listener, not so much to the speaker, as opposed to Western societies. Here, children are expected to develop and deploy interpretive skills and actively signal whether they understood or did not understand. So the onus is on the hearer and the listener to keep the conversation smooth, not on the speaker.

So, if they first and foremost have to pay attention to what is being said, they are supposed to be able to interpret it properly, and if they do not, they have to signal it to the speaker. So, that is what ensures a smooth conversation in Japanese society. And then there is another factor that, with respect to the repair, takes place more often with unfamiliar adults than with familiar ones. Because, obviously, with familiar ones like parents, they have a higher threshold for tolerating mistakes, so their children also understand that. We have already seen how joint attention develops pretty early in life, and thereby they are actually able to take the position of the hearer and figure it out.

So with parents, they do not really indulge in corrections as much, but with unfamiliar adults, they do more. Interestingly, it has been found that even orangutans repair their gestures based on the degree of comprehension by the addressee. So it is not only the human child but also primates that have been found to repair their conversational skills. So, to sum up, children are eager to communicate and usually try to achieve their goals, fulfilling the necessary criteria, and a baseline is generally created by the time they are 2 years of age; after that, they are simply refining and getting better at it. So, these are some of the variables with respect to turn-taking, timing, and repairing when the conversation breaks up. Thank you.