Language, Culture and Cognition: An Introduction
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Module - 03
Part - 03
Lecture - 08
Metaphor and Metonymy

Welcome to the 3rd part of module 3. We are talking about frames and Metaphors and Metonymy in this section.

So, far we have seen that metaphors are a particular way of conceptualizing the abstract domain which for many of us starts with the linguistic metaphors which is typically understood as the flower use of language and then, but then we saw that it is not merely so. The linguistic aspect of metaphor which is what we typically encounter, actually is the outcome of a mapping at a much deeper level.

Mapping at the level of concepts how we understand one conceptual domain through the structure of another conceptual domain and this is typically, more often than not, used for understanding the abstract domains. A lot of abstract domains are nearly impossible to conceptualize, or at least to talk about, without referring to some amount of concrete anchoring let us call it.

So, this anchoring is done through the use of metaphors and we have seen that because of this particular factor we call metaphors, conceptual metaphors in this course. So, many concepts especially the abstract concepts are structured and represented in terms of metaphor. So, they are not only structured, but also represented in terms of by the use of metaphors.

So, basically we have looked at how abstract concepts may, various abstract concepts, like time, like life, like relationships and so on how they are structured and how they are represented and hence how they are understood. So, metaphor thus is acognitive phenomena, it is not merely a linguistic phenomena, it is a cognitive phenomena it is a mental phenomena how we make sense.

Remember we started discourse with the whole understanding of what is cognition, how do we understand, how do we know that we know certain things and how do we use that understanding and that knowledge. Similarly, in the with the idea of metaphor as well, we have we have seen the same thing. So, how do we create cognitive schemata in terms of metaphor?

And then we also saw that this particular process; this particular process of mapping a one concrete domain on a an abstract domain is also related to, if not entirely dependent upon, is related to culture. So, now we will move on with slightly more detailed understanding of how the what do we mean by this particular thing of cognitive as well as cultural phenomena, we will look at certain empirical evidence, but before that let us just unpack this idea of or being a cognitive phenomena little more.

Metaphors are often called embodied simulation. Remember when we discussed the fundamental aspects of metaphor we talked about how bodily experiences lived experiences are often, if not always, often at the core of creating metaphors, this is more true of emotion metaphors than any other domain.

So, it is not only the case of metaphors, which is dependent on embodiment, but also many other kinds of understanding as we will gradually see in this course. So, embodied simulation is an integral part of human conceptualization; how we cognize the world has a lot to do with how we simulate certain situations, certain understandings, certain events and objects and so on, in our life.

So, humans engage in embodied simulation quite often, at various times, for various purposes. For example, for communicative purposes, for you know solving cognitive problems and so on and so forth. Not only that how do we not only this is understood at the theoretical level, but also we have adequate empirical evidence from the domain of neuroscience.

So, neuroscience research reveals that brain areas associated with visual processing of motion are active when people see pictures depicting real as well as implied motions. So, basically what we what this means is that, neuroscience has given us proof that brain areas are active, brain areas, which is related to motion perceiving motion, understanding motion are active not only when we see real movement of objects in space, whether it is a human

walking or a large ah boulder rolling down the slopes of a mountain and so on and so forth there can be various such kind of locomotions.

So, not only we activate our brain areas related to motion are activated when we see a real motion happening, but also when a motion is implied. This is often the case in case of cartoons, so you know, also in pictures. So, that is the static picture, but there is certain there are certain tricks that cartoonists employ for example, using something somewhat like this.

So, there is a let us say this is the boulder and then you have motion some like this and it might imply motion, the horizontal lines might imply motion. So, this kind of actions this kind of this kind of locomotion's in space can also be implied.

Now, what the brain does is, in both the real in both the case of real motion as well as implied motion the brain areas that is connected to motion perception, is activated. What that means is that we simulate. So, when we see an implication of a thing happening in front of us, even if it is not really happening, in real terms, we still are able to understand by simulating it. So, we are basically creating, recreating the event in our brain in order to make sense of it.

Now, this is a fundamental underpinning on which a lot of metaphorical understanding of in language is dependent on. In fact, a lot of empirical experiments, empirical data come from this part.. important hypothesis that this is already, this already happens human brains are capable of simulating things when even when they are not happening.

So, there are in applying this idea in terms of metaphoric understanding, in terms of metaphor processing, there are many studies that have taken place, both in terms of structural as well as in interview method as well as in by using various kinds of experimental setup. There are let us talk about the structural understanding first.

So, when asked about how you know to talk about racism or to talk about certain other ideas. For example, a difficult idea that you have been given, any person has been given for that matter and then it is very common to talk about it in terms of you know 'to grasp the concept', 'chew on the idea' and so on and so forth, 'turning it in my head' and so on.

So, it is very very common if we just go about analyzing the structural way in which people talk about difficult concepts abstract difficult concepts, it is very common to use the words like grasp you know he is 'he was quick to grasp the idea', 'let me chew on the idea', 'let me turn it in my head a bit'. So, basically this is almost you are simulating while you are talking about an abstract concept in this way the idea is that you are simulating the concrete aspect.

So, the metaphorical mapping basically takes you to the concrete domain in your mind, in your brain and then you are simulating the same thing. So, basically you are almost looking at an idea; idea is an abstract concept. So, you are looking at the idea as if you are turning it in your hand, you are holding it in your hand and then turning it and twisting it and trying to see all the sides of it which basically means analyzing a particular idea from every possible angle.

Similarly, the idea of the way you talk about racism. So, one 'we have to stomp out racism' we have to and these days more common is 'smash patriarchy', patriarchy is an idea and it. So, it is essentially an abstract domain, but we can talk about smashing it because we are able to simulate this as if it is a concrete thing and you can just take it and throw it down, so that it breaks into pieces and so on.

So, this has been this kind of research has this is one line of research that looks at processing of metaphor in terms of a concrete object and how we simulate that. So basically, this means this brings us to a situation where embodied experience can inform possible metaphor, we have already seen that that embodied experiences of throughout your lifetime.

In fact, Lakoff has a very interesting take on this. Lakoff whose work on underpinning metaphor actually built the you know shaped the whole area, whole domain of understanding of metaphor. Lakoff says that from childhood, from pre linguistic stages, even pre conceptual stages of children certain experiences go on repeating itself there are recursivity in experiences.

So, a child looks at two things: for example, he his famous example is that a child sees his mother you know filling up a glass with a with milk or water or whatever. As it gets filled up the it is you know the milk comes up. So, the verticality attached to more, so 'more is

up' is a connection that the child makes from the very beginning of her his or her life in the in this case, similarly many others.

So, basically our lived experiences, even if we are not conscious of it, this connection gets built up over a period of time and this connection also gets built up not only in terms of you know to two concrete experiences, but also in terms of the brain areas responsible for that and that is why we talked about neuronal underpinning of metaphor.

So, basically in embodied experiences make us make humans open to creating metaphors, open to the creation of two domains that can come together and you know one can help understand the other. So, this is already dependent on the embodied experiences.

But now whether or not a particular culture decides to use a particular metaphor is dependent on the cultural model. This is something we have talked about in the last lecture, but though in short. So, cultural model, what is the cultural model? Cultural model is nothing but a fancy term of the way a cultural group looks at a particular concept. So, this is almost invariant across people within a particular culture.

So, for example, the understanding of time; time we have seen in the last lecture, that time can be understood as a moving entity or as static entity and if. So, either time moves or the ego moves; there are though there are these various possibilities But not all cultures look at time moving in the same direction. So, for example, in case of Arabic time might move from right to left, but in English speaker time might move from left to right, but time moves in certain domains.

Similarly, many other such concepts that get metaphorized in terms of a culture specific way; we have already seen how cultures can differ from one another at the specific level. So, even though at the generic level we do tend to be we tend to be you know on agreement in agreement in case of certain embodied metaphor embodied understanding of metaphor, like the case of anger, like the case of you know love and like the case of life and so on.

However, there are those culture specific with differences in which we look at the specifics of that metaphor. So, that is where cultural model comes in. So, cultural models therefore, often act as a filter of metaphor, so choice of metaphor. The possibilities at the embodied level exists, but what we choose to create, what we choose to map is dependent on the group of people that is using that particular language.

So, basically metaphors and metaphors bring us together with the cultural aspect of understanding metaphor and as well as the embodied understanding. So, let us look at this in a bit close the in a little bit more in detail. So, what do I mean by this cultural aspect of, you know, cultural model of metaphor with two examples? One is time is space and time is money. Time is space metaphor we have already seen, the temporality is, more often than not, understood through space.

So, we can say that you know the *time for action has come* or you know, let us that the *this is that time of the week*, *the week just whizzed past* and so on and so forth, it is very common to use special terms as if something is moving across you know in horizontally or in case of Chinese even vertically. So, time is space is a near universal metaphor. So, this is where more or less there is an there is a lot of agreement across cultural models.

However, 'time is money' is these are some examples from Capelles paper. So, this is that *this week has just whizzed by in a blur, time for action has arrived*. So, this is what is the time movement of time and the ego is static in this case. So, *the best part of the show is coming up*. So, these are some of the examples very commonly cite used examples of 'time is space' metaphor.

And then this is a new metaphor for time, 'time is money' is comparatively new and it is, most more often than not, found in the industrial, western industrial societies and of course, now it is being used in other parts of the world as well.

So, when industrial revolution came in, the amount of time you spent on a particular work, on a particular, you know machine and so on and so forth, then that kind of translates into money that you make. So, the hour very concept of 'man hour' comes from that. 'Man hour' basically is dependent on the idea of time is money. So, this much of effort you put and the accordingly you get rewarded or paid or whatever.

So, this is these are some of the examples that that takes us to that fundamental understanding of 'time is money'. *The flat tire cost me an hour, I have invested a lot of time in her*, *you are running out of time*, *we run out of money*. So, *you are running out of time, budget your time, do not use your time profitably* and so on and so forth. There are innumerable examples I have, this is the these examples are given by Lakoff and Johnson themselves in their seminal book.

So, these are the two ways of understanding time, fine. So, there are this is as I said cultural models also play an important role. So, this is a kind of metaphor that may not be existent for example, in nonindustrial societies there are some societies that are still there in the world which are non which are not industrial societies.

So, there you may not find this so far so good. So, languages differ, cultures differ and we do use metaphors in different ways, we use different concrete domains to understand metaphor, which is again dependent on the background of the society and culture and so on, fine.

Is there a way to prove that? Is there a way that the simulation we are talking about, is empirically it is possible to show empirically? So, metaphor is essentially cognitive and only derivatively linguistic that we have agreed upon.

But now, we will talk about the empirical evidence, if at all that there exists empirical evidence and if it does, how does it prove that we are actually simulating that we are when we talk about time in terms of space, this is actually what is happening. So, there is a there is a give and take between time and space at the level of mental mechanism.

Time is so for the brevity of time I have chosen only a few of these examples. Later on we can look at more I can furnish more papers to look at it look at it more in a more in depth fashion. So, one of the most important most well-known researchers of our time Lera Boroditsky, looked at this understanding of the time metaphor in terms of space and whether we really simulate that, whether there is a online right you know online processing between online give and take between space and time as you process metaphors.

So, she said that time is not only spoken about in terms of space, but also thought about it that way, Which is something we have already been talking about there are lot of structural studies in that. However, she is the one who showed us through empirical evidence.

So, what she hypothesized is that if this is the way if we if a metaphor up of time with respect to space is not just in linear language, but also in the mind; that means, if we tweak the spatial negotiation, it will also tweak our understanding of the metaphor, with respect to time.

Very interesting work and she has carried out in fact, a lot of work in this domain, but we are referring to the 2002 paper here. So, this, they used two kinds of metaphor: EGO MOVING and TIME MOVING metaphors of time; we have already seen that either the ego moves or the time moves in terms of understanding of this.

So, this was the sentence that was used. *Next Wednesday's meeting has been moved forward two days*, this is an ambiguous sentence. Why ambiguous? Because this might mean two things. Why? If you take on the one hand, if you take the ego moving understanding of time then you have one reading of this sentence, if you take time moving understanding of metaphor then you have another reading, how we will see.

This was the sentence that was given to them was this and the question that was posed to them was: which day of the week the sentence was referring to? So, now, that the meeting of meeting that was supposed to be on Wednesday has moved ahead two days. When is the meeting now, is it on Friday or is it on Monday? That is the Monday preceding the Wednesday, these are the two options that the people would give.

Now, what they did was they did a slight, this was a priming experiment, priming is when you prime the subjects in preparation of the target object that they have to actually process. So, what they did was, before the subjects were actually given the target sentence, that the meeting has been you know moved ahead, the subjects were previously instructed to either imagine a forward movement motion towards an object or an object approaching them.

So, they were just told close your eyes and imagine that you are moving closer to an object that is there, you know a bit far away or in other cases, these are the two options; in one case they were asked to imagine moving towards a an object; in another case they were asked to imagine an object moving towards them. Something like you are standing at the railway station and the train is approaching towards you that is one option.

Another is there is a food counter let us say in a in the cafeteria and you are slowly approaching the cafeteria these are the two kinds of possibilities. So, the subjects the participants, who took part in that experiment were asked to imagine this, imagine mentally imagine. So, what is happening here is that the subjects are told, clearly, to imagine a movement in space; this is what is preceding the real sentence that was experimental the experimental sentence.

So, this is the tweaking of the spatial negotiation that we had just talked about. Now, once that is done, in the first case what is happening? When you are moving towards the cafeteria counter, the EGO MOVING metaphor of time is primed. So, basically you are now open to understanding of time also in the same way, EGO MOVING way.

As a result of which, there this was primed and they actually found that subjects mostly responded that the meeting now was on Friday. Why? Because let us say Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday. Let us look at it like this Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.

If this is the this is the way it is and the person has been already asked to think that he is moving closer, I am very bad at drawing just say this is the human and. So, the human is moving already on in space that has been already told that, you would please imagine this they were moving towards.

So, now, if they have already imagined and then the meeting is now here now, if we are moving across time and space in the same way, then you move closer to the day which is Friday, right? So, if you are thinking, if you are imagining yourself moving across the space in real life, then you will be primed to understand time also in terms of ego moving rather than the time moving right and then this is what will happen.

Now, in the second set of test condition was the subject was asked to imagine something else is approaching you, the train is approaching you in a station when you are standing in the platform. And in that case, the same person would or would imagine that because now because time is moving you are not moving.

So, you are standing here again the same case now time is moving. So, it does not matter that you remain standing there, but the Wednesday thing will move now to on Monday. This was the hypothesis that if you have understanding of ego moving in space or object moving in space, then the time understanding of time also will move accordingly. This was the hypothesis and this is the result that actually proves that hypothesis and this was an experimental work not merely asking them about what the.

So, they were they had primed the subjects and they had got the results that they were they are hypothesized. Similarly, they also did another type of the same experiment. So, they carried out this experiment in yet another setting, where they were not asking people to

imagine, but they were asking they were actually looking for people, they were actually utilizing the real scenario in this in order to get the understanding of how time was and time was conceptualized.

So, this question the same question, the question remains same asked to people in queue for food in the cafeteria and the more advanced the in the line the people were the more they chose Friday as the date referred to in the sentence. So, this is basically not imagining, but really happening. So, these people are actually moving in on a line to in a cafeteria in a, in they are standing in a line. So, the people who are more ahead in the line, they chose more of them chose Friday as the date referred to in the sentence.

Similarly, people who were waiting so, these subjects were basically chosen dependent on the scenario. So, the researchers just went and looked at people in the queue and asked, they were not primed beforehand. And similarly they were also went and asked some people who were waiting in the airport to receive somebody and many other such scenario, just went and randomly probably asked. And then when they are waiting for an object or a thing or a person to arrive and they are static, in that case again they got Monday as the answer.

This has been the seminal work by Boroditsky; of course, there are many other studies after that, but this still remains a landmark study that shows that the spatial if you can modulate the spatiality, if you can you know if you are embodying a spatial experience at that time your understanding of time will also change accordingly.

So, a direct mapping of spatial understanding on temporality, one the way temporality is conceptualized in a particular scenario. And this is the language used was of course, English. Another interesting study, that looked at that looks at processing of metaphor. Now, there are there is when you talk about metaphor, there is also another important domain that looks at whether metaphors are you know whether they are conventional understanding of the scenario or not or do you process. In other words, do you process metaphors as it is; that means, the connections are already made and they are solidified or do you need to go via the mapping. So, do you go, when we listen to a metaphor do we first look at the literal meaning of the sentence or do we understand them as it is, if we understand them as it is, then that creates a criteria that creates a category in our mind

already. So, a lot of work has taken place in this domain, trying to see whether this is called direct or indirect understanding of metaphor.

So, direct understanding of metaphor will imply that metaphors actually create a connection that is stable rather than,, you know you are creating them on the on the go as we encounter a metaphor. Lot of different paradigms have been used, but this one is rather commonly utilized one where the subjects are given a short very short story to read and the story ends in two different ways.

One is, it can end in a metaphorical word or it can end in a literal word. For example, let us say, we are talking about a short story like 'x and y had a heated argument over some property issues and you know x had cheated y out of the property and they were arguing over it for a long time. And then finally, y stormed out of the room or y left the room saying *I will see you*, this is the last sentence of the story I will see you.

Similarly, the story can also end everything else remaining same the last sentence can say I will take revenge for this. So, the point here is, in the first case he was saying that I will see you now the will see you does not really mean that y will sit down and stare at x. It means that he will see to it that he gets even with him, he takes revenge for the actions the, he will pay back for ,you know, paying back again is a metaphorical expression. So, he will give back to x what he has done to y what x has done to y.

So, the sentence can end either end in a metaphorical sentence or in a literal sentence both of them will mean the same thing; the story remains the same only the last expression changes. Now, what they do is what the researchers have done typically is that there is a passage like this, there are many passages each of them ending in a metaphorical or a literal word. And then, this is the prime and then the this is followed by a lexical decision task; lexical decision task is a very common paradigm in word processing in psycholinguistics.

So, what is what does it do? Lexical decision task basically is a task where some letters are represent presented on the screen and the subjects are asked whether this letter string is a meaningful word in that language or not. So, for example, we can have, let us just take this word itself. So, if we present it like this, versus we present it like this; in this case this is not a word, in this case this is a word this is the; this is a very simple experiment and where we just try to see whether if it is the given entity is a word or not.

So, decision task it is a decision, but what matters here is how we manipulate this. So, what they did in this particular experiment after the story. So, there was this is how experiments are graphically represented and. So, there is a story here and then it moves like this temporarily and then there is a word.

Now, this is where the manipulation comes in. The story if the story ends in a metaphorical word and then there is a related word that is metaphorically related to that metaphorical expression. So, for example, *I will see you* is a metaphorical expression for taking revenge.

Now, if the second, if this is how the paragraph ends and then the word that you have to decide on is let us say *revenge*. The relationship between revenge and see you is entirely because of what see you is actually metaphorizing not in the literal sense, see you here does not mean seeing in the real sense.

So, if the word, that is metaphorically connected, is presented immediately after the story the processing time is very very less, as opposed to presenting a word let us, say river. You present a word that is not metaphorically related to the word that ended the paragraph then the time taken will be longer.

So, this is what they mean by meant by that related words are processed faster; related as in metaphorically related words are processed faster. So, this is taken as an example of the metaphorical processing is embodying the understanding of what is happening there and they are already simulating that.

Similarly, similar findings have been reported by ERP studies as well. ERP is Event Related Potential; this is a data that is that is collected through using EEG Electroencephalography. We will look at methods later in the course. So, EEG basically picks up brain signals, as we process anything it can be a linguistic task, it can be a non linguistic task, it can be any kind of task any kind of processing that you are busy in and as we proceed with the task, the brain produces electromagnetic signals and that signal is picked up by the machine and this is what we have as a data.

So, this particular study looked at ERP data to see whether the there is any qualitative difference in the brain activity when people comprehend literal versus metaphoric language. So, as I said the not only is there the understanding of space and time and, but also in terms of simulation as well as whether we understand metaphoric sentences

differently from the literal sentences, these are the few domains where we have empirical data in terms of metaphor.

So, in this case also ERP data shows that there is no difference in processing time between metaphorical and literal sentence, which means that metaphors are understood in terms as it is, not via not going via the literal way, but as it is. So, this is a connection that has been already made and it is stable.

A stable connection has already been made in the brain of the people who speak that language and as a result of which, we understand that particular concept through that mapping.

So, this is about metaphor.

Now, we move on to yet another type of mapping that is metonymy. Remember we talked about metaphor in terms of cross frame mapping. Now, this is another mechanism which is within-frame mapping. Metonymy is a mapping that takes care, that takes place within the same frame. So, how do we define metonymy? We say the very often words stand for something else.

So, we may say that New Delhi rejected the hypothesis. So, this is something standing for something else, New Delhi is not a person, New Delhi does not have a you know a agency as in as a human being that can reject or accept things. So, basically we automatically know that New Delhi is standing for the government of India.

So, this is what we mean why words often stand for something else. Now, one such case is that of metonymy; this is the cognitive process where conceptual entity one conceptual entity provides access to another conceptual entity within the frame. So, within the frame of governance, let us say that is the that is the frame right now, within the frame of governance, there is the nation, there is the nation state, there is a government, there is a capital city and that capital city represents the government, in its government to in this kind of discourse patterns.

So, this is what we mean by one conceptual entity. Now, New Delhi the moment we think about New Delhi the entire idea, the frame that it evokes is that of the government

machinery, you have all those government a major government offices in New Delhi and new you know the whole picture that it invokes.

So, within that frame, you can make sense of the sentence like this. These are some textbook examples *the ham sandwich spilled beer all over himself,* this example is from Kovecses book. So, the ham sandwich spilled beer all over himself, basically is invoking the frame, which is the restaurant frame.

So, the there is a person who is eating, who has ordered ham sandwich and that person has spilled beer all over himself. So, let us, we can easily imagine the waiter or waitress talking about a person who has spilled beer inadvertently. So, who is the person the person? The person who has ordered ham sandwich.

So, this is the frame in which the people are there and the person who has ordered ham sandwich and who has also done something like, this you know all these things are part of the frame where one entity within the frame is referring to another. So, the one that is referring is called the vehicle and the of course, that is the target. So, remember in terms of in case of metaphor, we talked about source and target. In metonymy we talk about vehicle and target.

So, target is the one that is referred to. So, is ham sandwich is the vehicle here and target is the person who is eating it. So, rather than talking about the person who is eating ham sandwich, simply say the ham sandwich has. Similarly, New Delhi as I just said. So, this is the vehicle and this targets the Indian government denied the charges in the governance frame. Similarly, many other examples, this is very pretty productive, very common way of talking about abstract domains.

So, *Obama withdrew forces from Afghanistan* or let us say we can just replace Obama with Biden, Joe Biden withdrew forces from Afghanistan. So, the target here is US government. So, this is the frame within a frame one entity can refer to another entity and that is why we call metonymy a process a cognitive process that is entirely within frame.

So, source frames can be, so, how is metonymy created? Like we talked about how metaphor is created similarly how metonymy is created. Metonymies can be understood as I just said, of within frame mapping and because frames have, you know, many parts remember we talked about frames as having elements and events.

So, these are parts of the frame. So, a frame has the government frame has many parts; it has a capital city, it has offices, it has people, bureaucrats, ministers and then various other things and their jobs and what they do, each of them and so on and so forth, parliament.

So, these are various parts within a frame now if you look at it as a whole with parts, then you see that each element are part of that bigger whole, that the whole picture and that is why frames can be often understood as wholes with parts. So, there can be some specific types of relationship within this part whole relationship leading to metonymic configuration. So, this is what we basically in language, most languages of the world employ.

We play with words, we play with this understanding of a frame having, you know, a frame being the bigger picture which has smaller parts and then those parts can play with each other and with the whole as well and thereby we have this kind of; this kind of sentences.

So, this is there in literature as well as in real life. Literature we are not going to, because this is in this course, we are worried more about, we are looking at more about how language, commonplace language, everyday language are actually indicative of the mental processes.

So, we are not looking at *there are many sails in the sea* and stuff like that. We are looking at near simple language. So, if a whole if a frame is understood as the whole picture comprising of smaller parts, then there can be various kinds of relationship: the relationship of the whole with the part and the part with the whole and so on.

So, part-for- whole for example, *I will go to England this summer.* Now this can be taken as in both ways. So, if I say I will go to England this summer, I do not really mean to stay, stick to only England, as you all know England, when we say I am going to England I do not I might even go to Edinburgh, I might go to in other places.

So, England here stands for Great Britain, the whole country, right. So, this is what we mean by, when we have a part- for- whole reading of this. is what this is how it actually works I will go to England this summer. So, basically I am going to the country Great Britain and I might visit many parts of this, but England is the vehicle for us in this particular case to mean Great Britain.

Similarly, *New Delhi denied the charges*. So, New Delhi is one part within the larger bigger whole of government Indian government system. Similarly most people prefer ballot to the bullet. So, ballot, again standing for ballot is the vehicle for the for democracy and bullet is on the other hand is a part for the whole, which is autocracy. Similarly, the opposite configuration is also possible. So, we can not only exploit the part- for- whole metonymic configuration, but also whole- for- part.

So, *he hit me*, let us say when there is a boxing match or something of that sort. So, when one participant is hitting the other person, we do not say that, you know, he hit his nose or he hit his ears or whatever. Usually we say that contestant 1 hit the contestant 2. So, this is where it is the whole-for- part.

So, the whole of the person does not get hit at the same time, but the more conventional way of talking about is using a whole-for-part metonymic configuration. Similarly, *the car needs washing*, the whole of the car cannot be washed, as we all know, the internal part, the engine and everything do not get washed, but we still use a configuration like this.

Similarly, *America is at war*, America the moment we say America, most of us are do not tend to think of it in terms of the US, but we can also look at the America as the continent which also has other countries which you know many other countries beyond the United States of America. So, these are the two most commonly utilized metonymic configuration that we will find.

However, there is also another which we will come to, which is the part for part, which is a slightly lesser utilized one. So, how what are the kind of frames that get utilized for this kind of configuration? One is the 'thing and part ICM', these are the theories that have been given that there is one type which is thing and part. So, England is a stands for the whole of Great Britain. So, this is one bigger thing that has that is compressed of smaller parts.

Similarly, the car needs washing and then there is also the scale ICM. So, there are things that are on a continuum, you know for example, our age. So, we start with zero, to you know the time we ultimately move on. So, that is the continuum. So, that continuum is slight kind of a scale similarly, the heat. So, today's temperature is 30 degree Celsius for example. So, this is one particular point in that continuum, which is not exactly understood in terms of thing with part, but on a scale.

So, scale ICM, ICM is the frame, the Idealized Cognitive Model we talked about frame also has names like idealized cognitive model. So, idealized because they do not exist per se this is the human man made understanding that is why. So, ICM that talks about scale also is a very interesting domain where metonymic configurations are very very often utilized.

So, how old are you? So, how old are you?, we never ask anybody how young are you? even if they are actually young. You know personal or you know individual understanding apart a child who is 10 years old is also asked how old are you and the child will say 10 years. So, this is an way a way of utilizing this scale ICM. So, we use the word old, which is actually at the other end of the continuum to even ask a question to a small child.

Similarly, *he was speeding*. So, he was speeding; speeding is at the again another end of the continuum starting with a very low speed. So, you go and you know, through various stages to reach the final point, where you will be considered to be speeding, but we will just say that he was speeding.

So, this is a very another very interesting domain, another interesting frame that utilizes this metonymic configuration. Then there is constitution; constitution as in, the how it is created, how it is you, know not exactly in terms of different parts, but the same thing that creates the whole thing.

So, *she disappeared into the woods*. So, woods are basically a part this is what creates the forest. So, rather than saying that she went into the forest, we can easily say that woods she went into the woods basically meaning woods are the constituent part of trees, trees are constituent part of the forest and so on and so for forth.

Similarly, category and category and member; so, sometimes what happens, there is a category of an entire category that is represented by only one member of that category. For example, photocopy machines are all called Xerox machines, we do not it is more common to say Xerox, I need a Xerox machine rather than saying a photocopying machine.

Similarly, like aspirin; aspirin is one particular medicine that is part of that category of medicine, that are used for a particular purpose. Similarly, detergents in India it is more often than not it is Surf, because Surf was one of the earliest detergent powders in Indian market, that is why Surf has become a *face* of the category 'detergent powders'. So, it is

very common if we just go to any small shop, in supermarkets of course, nobody really asks, you can just go pick up.

But if you go to a small shop, who that still exists in India in smaller towns, you will see this is the sentence that is very very common [bhaiya ek sirf ka packet dena]. It does not necessarily mean that the person wants only that brand it can be any other brand, but they just want a detergent powder packet. So, this is what we mean by member of a category representing the entire category.

Similarly, aspirin; aspirin is just one member of the category of that particular category of medicines. Yet another domain is a 'complex event'. Lakoff gives a very beautiful example of complex event in his work. He talks about certain scenarios, certain events, certain experiences or complex event they are not as simple as you know having similar kind, having some parts and you know creating the larger whole, but they are complex events that have, not only that have wholes of that have parts, but also they have you know each of them having their own little small frames within that.

So, 'hospital' is such one such thing. So, you know you the moment I say I was in a hospital it does not only mean that you know you have gone there and you can be as a patient, you can be going there as a doctor, you can be going there as a nurse, as a service provider or you know there are many other such things.

So, if you take one smaller part of that you can say that you know this there are scalpel, there is operation theatre, there is a doctor, there is a surgeon who is operating. So, you know he the surgeon operated upon the patient; that means, immediately you invoke that particular aspect, a smaller event within the larger event.

But you can also say that you know 'I went to get my papers cleared after the during the discharge, during the discharge of my friend from the hospital'. So, these kind of things are complex events they are not simple things, like England being the part of great Britain. So, this is this because this includes a lot of complex happenings within that.

Similarly, I speak English. So, when I say, 'I speak English', it does not just simply mean that I can produce sentences in English language using words that are meaningful, it also means it should ideally mean that I also know where to use what, what kind of grammatical structure should be utilized in one scenario. So, basically the pragmatics and the semantics

along with the grammar of it. So, these are complex events. So, that also lends themselves to creation of metonymic configuration.

And now we come to the lesser utilized, but still it exists metaphoric metonymic configuration that is the part-part configuration. So, one-part standing for another part, so one part is the vehicle the other part is the target not the whole frame.

So, in this is yet another type. So, we will say some examples like this. the. So, there are many kinds of frames again, that gives rise to this the action ICM, while doing something. So, one of this most common metonymic configuration of part-part connection, part-part mapping is shampooing ones hair. So, the event of washing your hair these days everybody washes their hair with shampoo. So, this is very time specific, and you know a place specific.

So, shampoo is the object with which one washes their hair. So, this is one part in the larger event of washing hair. So, what we are doing here is, using the one small element 'the shampoo' and turning it into a verb and calling it 'shampooing ones hair', I have shampooed my hair, you have shampooed your hair or you know many such other configurations.

Similarly, authoring a book; so, author is one part of the larger activity the ICM that is 'the action of writing a book'. So, author is one aspect book is the product. So, author and the again we are doing the same grammatical transformation of turning the noun into a verb and using a sentence making a sentence like 'author a book'. Similarly, take a bite, sneeze the napkin off the table and so on.

Similarly, there are other; there is another I cm where is which is which he makes the use of cause and effect mapping cause and effect into creating a metonymic configuration. So, *she is my joy*, so, she is the person. So, the entire event entire understanding of the of a relationship within which, let us say this is a kid, this is a mother talking about her daughter, so she is my joy. So, this is the person who causes me to be happy. So, this is how the metonymic configuration.

So, the entire frame here is the relationship right. It can be any other relationship as well; it can be romantic relationship as well as a mother-daughter, parent-children relationship and so and so forth. So, she is my joy, she is one part who causes that, so the cause and the

effect relationship. Similarly, the train road by train is creating the noise, so we are using that as a mapping.

Thus, these are just some simple, small examples as if you can just sit down and think every language has this kind of mappings possible. So, this kind of mappings as in, we are understanding things, we are understanding objects, we are understanding events, even personal experiences of which is typically abstract in nature, through certain concrete experiences.

So, by using the idea of frame. So, this is where ultimately we can after we have seen that working how frameworks, how frame also works in understanding different kinds of concepts, not only just simple tangible ones through metaphor and metonymy. So, we can safely say that, frames are a very useful construct to understanding human conceptualization.

So, within that understanding of human conceptualization, we see that metaphor and metonymy can shade light a very important you know the that that gives us very important insight as to how human conceptualization process actually works, at least in these domains.

And then, not only that the language is taking us to the conceptual domain of this and as to how we have a one-to-one connection between language and the mental processes cognitive processes, but also that this process intertwines with the culture of course, the language and culture.

So, this brings us to the connection the tripartite relationship between language on the one hand, culture on the one hand and the cognition on the third. So, this is a relationship that is both ways, you know, it you can see that language is on the one hand it is not that we still are the final word has not been spoken as to what you know precedes what.

But, we as of now we have already seen that there are metaphoric expressions in everyday language, metonymic expressions in everyday language, that do exist that may be different from culture to culture, dependent on how a particular group of people, how a speech community or a cultural group, you name it, whatever you call it, they have a way of constructing that, they have a way of mapping that.

And that decides the choice of metaphor the choice of mapping that we will be ultimately used and; obviously, that whole thing, that entire process, goes, takes us to the conceptualization process of humans in a particular given ah space and time.

So, these are some of the references that ah have been used in this particular segment. So, with this, we come to the end of module 3, next week we will start with module 4.

Thank you.