## Language, Culture and Cognition: An Introduction Dr. Bidisha Som Department of Humanities and Social Sciences Indian Institute of Technology, Guwahati

## Module - 03 Part - 01 Lecture - 06 Frames: Yet another way to create and understand categories

Welcome to the 3rd module, part 1. So far, we have seen in module 1 we have seen that the historical backup, back draw on the in the of the course, as to how the field developed, how what are the different threads of discussion that have been taking place over a long period of time and how it all built up to where we are today. We started with module 2 to look at how we organize knowledge in the world.

How do we acquire knowledge, how do we organize knowledge and how do we utilize that knowledge is what cognition is all about. So, we started with one of the most primary functions of the human brain, which is categorization. Categorization is a primary mental faculty, which helps us organizing knowledge into the human mind, into categories in the human mind. These categories we have seen that they are a sort of a list of features.

List of features as in if we talk about [man] as a category, a man is a featherless biped, two features are adequate, necessary and sufficient to define a man as an human. Similarly, there are many other categories that we have looked at. So, what are categories, or as we have called them conceptual categories, are also what we call meaning in language. So, the meaning of [man] as a category is a featherless biped.

These are features that are inherent in that particular category; that means, of that word has certain inherent meanings that are part of that concept or conceptual category as we have talked about. Now, members of a category are similar. So, these categories are basically similarity based, similarity as in either they all share the same feature if we go by the classical theory. So, they are all same if not even similar they all are same, they are of the same category same membership, there is no gradients and if we go by the later theories there is a gradation, there is a hierarchy among the members of a category depending on the, again, the feature. So, the central member of a category is the prototype of that category, but it also has the flexibility of having members who do not share all the features.

So, there is something a category like something like game, which has some examples good examples, some not so good example, some bad examples and so on and then, but even then there are some features. So far we have been talking about organizing knowledge around a particular concept in terms of features. So, this is what is called the feature based semantics.

So, concepts or categories or words they can be put under one box, they can be put together in terms of some feature, some quality, some parameters, this is what we have seen. Though there are certain differences between the theories, among the theories and the later developments and so on, but roughly this is where we stand as far as module 2 was concerned.

Now, let us problematize this idea a little further. How do you define a word like Sunday? If somebody ask what is the meaning of Sunday, a word like Sunday; what is the category Sunday? What is it? How do you, what is the inherent feature of the word Sunday? Or for that matter any day, let us take it Friday. So, what is a Friday? Going by Lakoff's example, a Friday could be thought of in terms of the last day of the working week, the first day of the weekend, if you are depending on who you are talking to, it can have many other interpretations. In certain parts of the world, this will be the weekly holiday and so on. So, you see there is hardly any inherent feature in the word Sunday or Friday or for that matter any other day or any many such concepts, there is absolutely no feature on the basis of which you can categorize them.

So, feature based understanding of categories have some problem. Now, take the example of another category that is famous, that has been made famous by Lakoff and others is the category of 'knuckles'.

What is a knuckle? Can you define knuckle in terms of certain inherent feature, without referring to another category? It is nearly impossible. So, knuckles have to be defined in terms of the hand, hand in terms of the body and so on and so forth. So, the problem that we are now beginning to see is that categories are, if you talk about features in terms of categories, it is not enough to talk about only in terms of features. Because there can be cases where there are no features, so to say, to define a category, to define a particular concept.

So, feature based categorization fails to capture this kind of a nuance, in terms of our organization of knowledge. So, as we have just seen that the category Sunday, the concept of Sunday, is not possible without having the concept of a week, 7 day week or you know 30 day a month which has so many weeks and so on and so forth.

If you does not, if you somebody does not have the idea of a week or weekly calendar or the way calendars are these days, they will not understand what a Sunday means or what a Friday means or any day of the week that means, so on and so forth. So, feature based categories fail to represent this aspect of concepts.

So, all the information that are connected to one particular concept are not possible to be captured in terms of frames, because we have already seen the in terms of categories the theory of categorization that we have seen till now.

Because we have seen that categories are defined by a set of features and they have to be you know optimal, they have to be necessary and sufficient, whether you go by classical theory or you go by prototype theory there are still some set of features. Of course, we have also seen that those set of features tend to change over time and space and people and so on and so forth, culture.

But at the end of the day, there are still a lot of features that define them and you cannot really have a too many of them, because that will not be optimized, that will it will not be possible to optimize the resources in that case. So, category where feature based categories fail to capture the entire amount of knowledge that is necessary and important for us to understand the concept. Let us look at it a little more in detail.

So, there is a structure of information that various aspects of a category needs to be, those aspects need to be, foregrounded in order for us to understand what that means. So, this is exactly where the concept of Frame comes in and this is what we will look at today. The idea of frame; frames have been called by various names: the there have been names like scene, scenarios, script, cultural model, idealized cognitive model, gestalt schema and so on and so forth.

But largely all of them refer to the same idea. this idea of frame semantics frame or frame semantics as it was called was developed by Charles Fillmore. Basically, Charles Fillmore

built up on his idea of case grammar which preceded frame semantics and he developed on that and came up with this idea. So, basically this is a later version of case grammar.

So, he started with case grammar and then went on to create a theory of Frame. So, before we go on to more detailed analysis of what a frame is, how we define them and how we use them let us go back as usual to a little bit of history of the idea of Frame itself. So, case grammar as proposed by a Fillmore is some somewhat like this, it is defined as a linguistic system which analyze the link between the valence or that is the number of subjects or objects of a verb and the way they are connected.

We all know that there are transitive verbs, intransitive verbs and ditransitive verbs and so on and so forth. So, depending on how many objects and subjects a verb takes and how are the relationships between these between these categories: objects and subjects and verb how do they really work out is what he is talking about, that is the valance. So, in "Case for Case", Fillmore discussed about deep cases which says that each verb selects a certain number of deep cases which form its 'case frame'.

So, basically a larger picture within which the verb is situated, the verb at the center and it has connections to the various objects and subjects and that is how a larger picture is built up. So, basically 'case frame' focus on the valency, that is the argument which is called the argument structure of a verb. Meaning, how many nouns and so many things, so many other grammatical categories and are they connected to the verb and how they are connected, what is the system between them and so on.

So, according to him, human beings are capable of making certain type of judgment about events, "who did it, what it who it happened to, what got changed" and so on and so forth. So, if you ask this kind of questions, the sentence gives you an answer. So, basically depending on these, depending on the cases, depending on how many cases a verb takes, these are the questions that you can ask and you get answer for that. So, basically it is the whole picture that the verb relates to.

It is on the basis of such kind of a notion that he later on built up what we call, what is what was called frame semantics and today we refer to is simply as Frame. So, a textbook definition of a frame is somewhat like this: structured mental representation of a conceptual category. So, basically it refers to a larger picture of a category of a concept. So, when we talk about Sunday, we have a bigger picture of a weekly system of calendar, and then the week is part of the month, and the month is part of the year and so on and so forth. So, this is the structured mental representation. So, every category has a bigger structure within which it is positioned. So, meanings are relativized to frames. So, this is the frame, so the larger picture, the context as we will see in a while.

So, this larger picture or the context is what defines the meaning of the word. So, meanings are relative to the frame, within which it is placed and that frame can change, for every word the mean there can be many frames, that is why this word relativized is very crucial. And not derived in terms of inherent properties. So, we have seen that certain categories can be understood in terms of inherent properties, but there are many notions, many ideas, many words that simply cannot.

And even when simple things which apparently have inherent properties, also become problematic in discourse, while we talk depending on how we position it. A good example of finding these problematic scenario is to notice the politicians' speech, how they talk about the same object, same thing, same concept, same idea, but put it entirely in different ways or sometimes almost in opposing ways. This is how it is possible, as we will see in a short while.

So, concepts make sense against the backdrop of various forms of knowledge, frames of knowledge. So, depending on what kind of a backdrop you are creating for that particular frame, for the particular word. So, the basic idea in case of frame is that each word invokes a frame, each word that we speak invokes a frame. The very word, 'word' as I am talking about it also makes a sense within the larger concept of 'language'.

If we do not have, if we do not understand what a language is all about that language has words, language has sentences, language has you know sounds, language also has a written some cases in most languages in the world or let us say in many of the languages of the world that is also a written form. So, there is a spoken form, there is a written form. So, all these knowledge, all these information structure is the backdrop within which we understand a simple word like 'word'.

So, this is what we mean by each word invokes a concept, each word gives rise to, activates a bigger concept. For example, a sentence like 'the teacher asks the student why he has not

submitted his work'. Now, let us just look at the word 'teacher', the moment you utter a word like 'teacher' there is an a gamut of information that is activated in your mind.

What a teacher does, what is the expected behavior of a teacher, what is he or she supposed to do and what is the relationship between a teacher, canonical relationship between a teacher and a student. Within this larger Frame, we make sense of this particular sentence. There is no problem at all in conveying the meaning that the teacher is in a position to demand an answer from the student as to why he has not submitted his work.

This is possible because we understand this kind of concept between a teacher and a student within the larger understanding of educational system as is prevalent in the world today. So, this is what we mean by every word invoking a concept, larger concept and which, in turn, invokes a frame within which the word makes sense.

So, this is what basically is the definition of a frame. So, if we put it simply, each word is understood within the larger set of associated concepts. Now, this is important, associated concepts because in a frame, as we will see, that there are lots of concepts that are interconnected in a frame. So, depending on which word you are using at that given point of time you are invoking, you are activating a lot of associated concepts.

Similarly, in the next sentence if you are using another word from the same concept a slightly different arrangement of those concepts will be utilized at that moment. So, associated concepts make what is called the frame. Simultaneously, each word also points to a particular perspective, as I just said. So, if we are talking about using one word, it highlights one perspective within the frame, if we use another word within the same frame we are highlighting another aspect.

And, if we; let us see this with a set of an example. So, the word buy and sell: the word buy, to buy something, I bought a pair of shoes, I bought a new refrigerator, I bought x y and z. This word 'to buy' makes sense only to people who understand what a financial transaction is all about. My favorite example to give in this kind of sets, scenario is the film, The Gods Must Be Crazy, where you can see easily. Because we are largely homogenized, the world is almost homogenized on a large on many large amount of factors. So, we all understand the concept of buying and selling, but there might be some pockets of communities somewhere here and there, who have no idea, the concept of financial transaction simply do not exist. So, in that case it will not make any sense. But

by and large, we understand the word 'buy' because we understand the concept of financial transaction. So, this is what we mean by each word invoking the frame.

So, if we are talking about buy; that means, we are invoking the frame of financial transaction, this is the frame. So, this is a big picture within which you situate, also it shows the buyers perspective.

What do we mean by this? Let us just see. This is somewhat this is kind of a of what happens. So, let us see; so I bought a car. So, this is what is the word I am highlighting. So, if I am talking about 'I bought a car' we are basically highlighting this part of the frame as you can see these few concepts of buy, sell, money, and car are part of the larger picture of financial transaction.

So, this is the frame, let us say this let us call this frame 1. So, this is the larger frame within which the sentence I bought a car makes sense, I can easily say another sentence keeping the frame same and say 'he sold me a car'. Now, when once you say 'he sold me a car' this is the aspect of the same frame that we are highlighting, this is what we meant just in this sentence that it also shows the buyers perspective.

So, if you talk about, if you use the word to sell you are now highlighting you are bringing forward you are foregrounding this aspect, selling aspect of the transaction and if you use the word buy you are highlighting the buying aspect. Similarly, we as all of us know, buying a vehicle these days is not a simple transaction between the buyer and the seller.

So, what is the larger frames, the financial transaction frame is that there is a buyer, there is a seller, there is an object that changes hand in exchange of money. This used to be a simple thing some decades back, but nowadays there is also a lot of other things there is a bank, there is a loan, there are EMIs, there are paperwork and so on and so forth.

So, automatically let us say this I 'the car was financed by the bank', this is also another aspect. So, let us say here we can create another small this thing by using the this is another way of highlighting the same transaction. So, this is what we mean by it highlights a perspective. So, depending on the word you choose. So, both this say I bought a car, let us say I complete the sentence like this 'I bought a car from him' and 'he sold me a car' these two sentences basically mean the same thing.

Both of these words bought and sold refer to the same frame; however, highlighting different aspects within that frame. And then we can do similarly, we can go by the financed and then there is registration there is you know so many things. The new car has a, 'the car I just bought has a dent'. Why is this sentence, why is it a sad thing because a new car should not have a dent and so on. So, basically this whole understanding of all these sentences are part of the bigger frame which is which we are calling as frame 1.

Now, financial transaction is just one kind of transaction that humans are engaged in, there can be so many other types. So, again financial transaction is part of even bigger frame which we can call Frame 2, as human various kinds of transaction and among humans and so on and so forth.

This is what is the roughly the idea of frame or context or you know idealized cognitive model and so on. So, each word activates a frame with which we understand the concept represented by the word. These added related information is part of the concept. So, buying and selling as you have just seen, is understandable only when we know the whole picture, in vacuum, in isolation, these words do not make proper sense. Now, this helps categorizing that concept within a set, within a larger set.

Whether a concept has essential features on essential necessary features or not idea of frame is important. So, even sometimes even if the word has 'buy' for example, transaction financial transaction is kind of concept which has certain inherent features. But even then it is if you posit it inside of a bigger frame inside the larger context, it makes the idea of frame will still be helpful for understanding, but sometimes it is more helpful when there are problematic cases.

In any case; so let us take an example the word 'widow'. So, this word has features, this has necessary and certain features which means, this the widow refers to a woman who has lost her husband, so; that means, she was once married and husband is no more. However, the very word 'widow' might invoke completely different sense given different kinds of usage, different kinds of context whether it is cultural, social you know financial and so on and so forth there might be a lot of associated concepts that are part of the idea of a widow.

So, the overall implication of this concept in a given scenario you need to have the understanding of the broader picture of marriage and what it entails and the consequences of death of a husband into account have to be they have to be taken into account. So, this might mean up, it might this might you know refer to a completely different picture in one scenario and a very different picture in another scenario.

So, what marriage does to what marriage entails and what the death of a husband entails are may be different in different scenarios. So, even then, even when a word has necessary and sufficient features having the understanding of the frame within which that word is placed in a cultural and social scenario makes us understand things better.

But sometimes you do not even have, the concept does not even have, a set of inherent and necessary features and then it is of course, of much larger importance, the idea of concept idea of frame is much larger importance because you need to have a bigger picture within which to make sense. So, you will see that the word 'knuckles' makes sense only in the backdrop of the hand and the hand again in terms of the body and so on.

So, there is an ever larger frame within which you understand this concept. So, many concepts, words are understood only in terms of ever inclusive frames that include that, contain that word. So, knuckle within the hand and hand within the body and so on and so forth. So, meaning and understanding of the meaning of these words otherwise in isolation will be very difficult.

Similarly, many other words problematized words these days like freedom. So, we there is a lot of debate going on these days where freedom stops and where anarchy starts and so on and so forth. So, to understand that also you need a larger frame. So, freedom does not mean the same thing in every context. So, it is not possible to understand without, on not only understand, but also referring to, without referring to the idea of human societies, nation states, laws and so on.

Laws are different in different nation states, what is the nation states why do they exist what are the purposes of the government and so on and so forth within which we understand 'freedom' and so on.

So, it is not easy as we see that concepts are rather problematic and some one good way of creating some kind of clarity is the use of frames. Hence, Frame is an umbrella term of for context of different types. A context can be understood as a bigger picture as we have just

seen embedding the word or the concept that is the narrative background. Why narrative background is important we will see shortly.

So, this context can refer to is historical, social, cultural beliefs and structural background and so on and so forth, structural background like the knuckles part of the body and so on and so forth or leaves part of the tree and so on. So, if we talk about the historical, social, and cultural beliefs, all of them bring about a large amount of flexibility in placing a concept.

In fact, that is where a lot of disagreements in modern times stem from so, but we do not words as we have just seen words do not make any sense without the context. And when we take so many things into consideration, then that is what gives us a lot of flexibility also and that flexibility is sometimes not so good as we see. So, consequently a concept can be part of many frames depending on the choice of words. This is extremely crucial.

So, one concept can be part of many different frames, let us take the example of freedom. So, the word freedom can be part of the domain of you know cultural belief systems, on the other hand it can be part of the criminal justice system and so on and so forth. So, the word 'freedom' is can be part of many different frames, same word, same concept. Now, the concept can have different manifestation in terms of in linguistic terms by using different words.

A simple concept can have different faces let us say, different words to talk about them and depending on the choice of words we can actually place them in different context. So, let us talk about the basics for structure of frame, frames have a structure, it is not when we say that each word or each concept invokes a frame as a larger picture of things, that larger picture is almost endless, it there is a ever inclusive bigger frame and so on and so forth.

However, then it still has a structure, there are elements and there are events in a, elements are basically the nouns, events are the verbs and in this particular in any frame. So, Frames are made up of small little things entities, they can be divided into two categories, one is called the element, the other is called the event. Largely grammatically speaking elements are the typically the nouns and noun class and the verb class let us say.

So, Fillmore, we will stick to Fillmore's example here, a sentence like 'I lost the game' activates this frame, the frame [competition] frame this is an example that Charles Fillmore himself gave. So, I lost the game makes sense only because if I am talking about I lost a game and the listener understands the sentence perfectly fine; that means, both of us have invoked the same frame. What does this frame include? These are the elements.

All these are part of the larger concept of competition. So, competition has participants, there are ranks, there is a score on the basis of which somebody loses somebody wins. And then there is the competition, then there is a venue, there is an outcome and there is a prize, if the winners always get a prize. And then there is competition and then there are events, so one can lose, one can win and so on. There will also be a referee, some moderator and so on and so forth. So, these are the elements and these are the events.

So, this is the whole picture of a [competition] frame that a simple sentence like I lost the game invokes. So, you already know that there are participants, there is a, there is a particular activity on the basis of which you have to score and there are rules that you have to follow and so on. I think there has to be another every competition has its rules and so on.

One important aspect however, about Frame is that it is called idealized cognitive model. Another name which is very commonly used for frame is ICM, ICM stands for Idealized Cognitive Model. It is cognitive, because it is your this is something you are creating in your mind, this is something that the mind produces and it is idealized because it is not out there in a pre-existing form. That is this is no prima facie frame out there in the world in many cases.

So, for example, the idea of the weeks or the days in a week do not exist in the world. What exists in a in an in a objective way, what exists is the movement of the earth with a with the sun and so on and so forth. But the week, the idea of a week is a concept that has been created by humans. So, this is the 7 day cycle is a frame that is idealized, it does not really exist, it is not objective.

Remember we talked about how reality, whether reality comes in a structured form or reality is created. So, this 7 day week reality is created, it is construed that that is what we mean by idealized cognitive model, this is something that humans have created, we have

created a structure to for our own benefit. So, they are construed that is why they are open to cultural variations.

Because this is exactly where the problems also lie and the flexibility also lie.

Now, how do we use frames? We have now till by now we have hopefully understood the basic understanding of what a frame is, how each concept and what invokes a frame and so on and so forth. Now, how do we use it? First and foremost, it is it helps us understanding meaning of individual word, because we understand meanings of words in a relativized term in the in the backdrop of a bigger picture, because we have already seen that words invoke the frame.

And many words may belong to a particular frame like all the elements and all the events are part of a larger frame like we have just seen. So, commercial frame example a commercial event frame we have just seen that how these things are part of the same frame. And then depending on which of these elements or the events you use in a particular sentence, we are simply highlighting that aspect, that you have already seen.

A better exam, more useful usage of frame is in case of problematic cases of categorization. Sometimes there are some concepts, some categorical concepts or conceptual categories that are difficult to you know put in a particular, to be framed in a particular concept, particular category. So, this is when frame, idea of frame helps us. So, many of our categories are similarity based as we have already seen, held together by a family resemblance like this.

For example, things in a store are arranged in a particular way according to their category. So, let us say different kinds of nails when we go to hardware store, if you see that nails are put one at one place, the paints are in put in another shelf and all the other things that go together are put in different shelves. So, these are similarity based categorization, in the meaning they have the same family resemblance, they are similar in terms of family resemblance.

So, all the paints and everything are together, all the nails are together and so on. So, similarity based arrangement; however, if you go to a shop that is, you know, that frames pictures and sells them you will see a different organization of the same thing. So, in this particular case, nails can be stored with other articles related to hanging pictures. So, in

the nails, the various kinds of you know threads or the various kinds of frames and so on can be put together at the same place.

Now, if you go by similarity based judgment of a category, this will not make sense. Why are we able to make sense of this? Because they are part of the larger frame that is the larger picture of use of the frame. So, this is an usage based frame, on the basis of which you can see things can be put together very easily. So, in this case nails are categorized with things like adhesive, picture frame, ring, strings etcetera.

So, this is they have these things are not similar to each other in terms of feature based similarity. So, nails big and small can be part of the same category, but nails and adhesive have nothing similar. So, that is what we mean that in this case we need to invoke the frame, in this case it is the use of that particular object within which it is making sense.

This hence this is not a similarity based categorization, but a frame based categorization. So, this is how frames are useful in certain cases, this kind of categorization also happens in larger, in a much larger scale as well, in what we call cultural differences. Cultural differences one good example of cultural difference in this case is the case of European markets where fish and lemon are sold together.

In India lemon is always sold in the vegetable market, along with other vegetables, fish is always sold with other fish or other kinds of similar products like meat and eggs and so on. In Europe, in many countries, you will see it is a very common site to have fish and lemon being sold in the same store, it might appear strange because this is not a similarity based categorization. But; obviously, there is something that is that binds them together.

What is that something? That some something is frame in this case, the frame that is they are consumed together, it is eaten together. In many European countries fish and lemon are eaten together and that is why it is for people, who are not used to this kind of an understanding this kind of a cultural frame, it is difficult to understand. However, this is exactly what is happening in real life at a larger scale that is the use of frame.

Similarly, another domain is the prototype effects and the boundary issues. So, the category of 'bachelor'. So, I am using all the textbook examples this is also a very well known example in while discussing frame, the category 'bachelor'.

Now, this on the surface appears a very unproblematic category, a bachelor is a plus adult, minus marriage, male, typically who has crossed a particular age. So, a 40 45 year, 45 he is 45 years old and he is a bachelor, makes perfect sense. So, one is either a bachelor or not a bachelor, there should not be any problematic cases in between.

However, there are some members who might fulfill all the criteria, all the inherent sufficient and necessary conditions of being a bachelor; however, they do not. So, in ordinary in ordinary cases, ordinary scenario, ordinary meaning of bachelor is this is these are the features and the frame that we invoke within which I understand the idea of bachelor, concept bachelor is the 'average male life cycle'.

So, all humans have go, typically go through a simple life cycle of birth, marriage, you know old age and death and so on. So, within which, within that particular average male life cycle the understanding of bachelor is uncomplicated, it is very simple and straightforward.

However, even a case like this appears to be problematic, if you think of certain members who should be members of this category; however, they are not. So, the case of the Pope, it will almost be blasphemous to call the Pope a bachelor. Why? Even though he fulfills all the criteria, Pope is always an elderly person who does not marry and so on and so forth. However, even if he has all the essential features, he cannot be considered a member of the category 'bachelor', the reason is this.

Again, frames come to our rescue, because the frames here are is not the same as the frame of a average male life cycle in case of humans. We have to invoke a very different frame in order to understand what the word the Pope means, it is he simply does not belong to the average male cycle, male life cycle, he belongs to this category belongs to the larger frame of the Catholic Church and the rules. So, that is why it is not possible to put him in that category.

Similarly, frames are also a very useful to account for cases when there are almost no essential features, like the case of 'mother'. Now, we might find it surprising if we say that the category mother has no essential features, because we all know it is almost unequivocal who a mother is. But, let us see that this even something as you know as essential and as taken for granted concept like a mother, can also be difficult to put together.

So, let us consider the different kinds of mothers. So, you have stepmother, you have unwed mother, foster mother, surrogate mother, adoptive mother, donor mother and so on. There are ever more new members into this category that are getting included every decade. So, donor mother concept was not there before. Similarly surrogate is also relatively a new term, now it has become very common. So, these are the various kinds of.

So, the very fact that we are using the word mother with all of these means that we if we look at this concept we look at these members of the category also has a mother. So, that makes it a little problematized. So, typically the word 'mother' should mean or it has been meaning the person who gives birth, a person the woman who gives birth to a children is the mother of the children. But we have already seen that there are so many other members who might not follow the pattern.

So, here George Lakoff has a solution and he gives this five way, five models of how we can see, how we can place the different kinds of mothers within the larger concept of the category [mother]. So, one is the birth model: which is the simple straight forward who gives birth. Then there is the genetic model: the person who provides the genetic material is the mother.

Similarly, you can also think of the nurturance model: even if the person has not given birth or has it does not have the does not give the genetic material, but nurtures the child, is also called a mother.

Then there is marital model: the mother is the wife of your father, which sometimes may not happen, but sometime, but sometimes it does. And then genealogical model: that is the closest female ancestor.

So, a person in which all these five models converge, is the prototypical mother, that is the mother that we all identify with immediately. However, there can be cases where any of these five models can be violated, but still, because it satisfies the token satisfies any of these types and can still be called a mother. And then they are still called a mother.

So, we have to really figure out how it is happening and this is how it is happening as far as George Lakoff is concerned. So, this is considered a complex frame, this is not a simple frame this is a complex frame that constitutes motherhood and we understand all these variations by using these models. Frames are also useful in making sense of different understanding of the same scenario. How is it possible that we look at the same scenario and derive different meanings? So, this is one of the most powerful exam.. use of frames. So, for example, if you look at a sentence like this in both these sentences Vikash is stingy versus Vikash is thrifty. Now, both these words mean roughly the same thing that this person does not like to spend money.

A person who does not like to spend money can have many reasons for not doing so. The way the other person describes him is how we are putting him, it is how we are looking at him; that means, it is how we are framing the entire concept. So, one person can say that Vikash is stingy which means he is not generous.

On the other hand, you can say that he is thrifty, while we are putting this in juxtaposition to the concept of wastefulness. By simply using, by simply replacing one word with another we are capable of creating an entirely different meaning of the same scenario.

So, in one case it is a positive thing, that he does not like to waste money. On the other hand he is not generous he is a miser. So, stingy basically refers to somebody who is a miser. So, it is a negative connotation for the person similar as opposed to thrifty. So, you see this is what we meant in the beginning of the lecture, that a word, every word invokes a frame. However, depending on the kind of concept you actually want to refer to, it is a smart choice between the kind of word you choose.

So, you can, if you want to make Vikash look bad, you use the word stingy, if you want to make him look good, you use the word thrifty and so on. Similarly, there are exam, many other such examples, like he spent 2 hours on land versus he spent 2 hours on ground. This is yet another textbook example of the same concept, that by simply using either 'land' or 'ground' you are changing the background of the story entirely, because both land and ground refer to the same concept that is terra firma.

But if we use land, we mean we will refer to a different historical background, like where he was just before he was on land as opposed to where he was if we use the word ground and so on and so forth. So, this is what we mean by the choice of words taking us to a concept which in turn is placed in a different frame altogether. This is why the understanding of frame is very crucial in order to understand various kinds of discourse. So, similarly there are different ways to categorize eggs of fish, we can call them roe, we can also call them caviar. So, again if we say roe, we are simply using the frame, we are simply invoking the frame of the reproductive cycle of the fish. So, simple thing is a biological product eggs of a fish; however, the same egg of a fish can be referred to by using the word caviar.

Now, the moment you say caviar just imagine these two tables, we all know that caviar is a fish egg of a particular kind of a sea fish which is extremely, exorbitantly expensive. So, if we say 'there is roe on the table', then 'there is caviar on the table' only thing we have changed in those two sentences is the choice of word to refer to the same entity. We are referring to the product of fish and everything else remains same, anybody listening to either of these sentences can easily mentally picture where the table is.

This table is probably in the fish market; in many European countries, in many European countries, you will see fishermen sell their fresh catch right next to the river, right next to the lake and so on. So, they will have the this table is certainly near in a fish market, either next to a lake or in anywhere else. So, this table is certainly not in a very fashionable place; however, this the second table is most certainly not even 5 Star probably it is even in a far more luxurious restaurant.

So, you are just so this picture this is a picture that the larger picture is of a fish market, the larger picture here is of luxurious lifestyle. This is what we mean by the fabulous use of frame by simply changing the word, for a particular concept we are placing it in a different frame and giving the whole concept a different makeover or different understanding or different you know placing and so on and so forth.

Hence, multiple frames for the same thing play a major role in a wide range of important issues in language understanding and categorization.

Now we see how. So, this is the background, this is the fundamental aspect of what a frame is and how frames are invoked, how frames are created, how they are used in understanding language. Now, let us go to the usage in terms of remember we talked about the cultural, social, historical background. So, this is what we will explore now, using language example from language So, language is a large classificatory system, language itself creates, helps create categories; we have already seen the category of gender, number, object categorization in the in module 2. Then we will now see the category of classifiers and how classifiers are also dependent on the frame understanding of frame. So, language makes categorize, categories and then grammaticalises them, there are many ways one is this grammatical gender marking that that something we have already seen.

Another category another grammatical aspect, that helps categorizing certain concepts, that are often more often than not culturally determined. There is nothing objective in the word that makes us categorize them this is very very often relative to the culture. So, classifier language this example is taken from George Lakoff's very famous book ah Women, Fire and Dangerous Things. So, he talks about a particular language Dyirbal and this is an Australian aboriginal language.

Now, this language has four classifiers. Now, what are the classifiers? Classifiers are those grammatical entities that are obligatorily affixed to the nouns of that language. So, all the nouns in this language has to take one of these as a prefix. Right? So, precedes any of this so there is no possibility of talking about any noun without prefixing one of these four classifiers.

So, these classifiers as a result of which what happens is that all the nouns are basically categorized into four different classes, this is very easy to say now, once we have the analysis in front of us, but imagine a linguist going into an unknown, previously unknown language and suddenly realizing that apparently there is no rule as to why different kinds of nouns are taking the same classifier.

So, four classifier is something like you have taken classifiers in your hand and just thrown them into the vocabulary and whoever attaches whatever kind of a feeling you get. However, once you get down to more deeper analysis, once you try to understand what is really happening this is what they found out that these are classifiers that are attached to all the nouns in the language and there is a rule. That rule was not immediately discernible to a European scholar, but it was perfectly sensible from the perspective of the speakers of that language.

So, let us just see what are the different nouns that each of these classifiers take. So, the classifier bayi takes is associated with the words these are English words. So, we are not

putting the Dyirbal words here. So, the English all the words for these English words take this classifier. So, let us say; let us say this is a bayi this is a, Dyirbal word so it will be like something like this and then bayi kangaroos and bayi bats and so on and so forth. So, the all these words and many many more or will always be preceded, that is there is a prefix 'bayi'.

Similarly, there is another classifier that is balan. So, Lakoff categorizes this as category 2: he just simply calls them category 1, 2, 3, 4. So, you see, the kind of nouns that this particular classifier takes, that is women, there are snakes, there are birds, there are fireflies, scorpions, fire, water, sun, all kinds of things that are not similar, in terms of let us go back to our similarity based categorization.

What is similar between women and fire or women and you know, sun, women and birds and so on and so forth. So, this is why a similarity based understanding in terms of features is not possible to make sense of, if we go by feature based similarity there is it will not make sense as to why they are put together in one category.

Obviously, if you are using the same classifier for so many nouns; that means, you are looking at them similarly, they are similar in some sense. And what is that sense we will see shortly. Similarly, there is a category 3: 'balam' and then it takes it puts all kinds of food, basically non flesh food. So, there is some amount of similarity between them.

And then there is 'bala'. So, basically all the rest that are not part of the other categories, but the most interesting category that Lakoff was intrigued by is the second category 'balan' which has all these women, fire and all the dangerous things put together and that is why that is how he names his book, very famous book.

And so the principles how does it then work, what is happening, what is at play here is what he tried to figure out. So, and then he comes out with these three kinds of principles that is happening here.

That is at work while this kind of classificatory system works. So, as far as the mythology of this particular culture goes, the sun and the moon are a couple. So but as opposed to our understanding as to who should be the man in the in this couple, it is the moon, in this community in this language in Dyirbal, the moon is the male, the sun is the female.

So, sun is the wife of moon, which is something that is not very common in other cultures. So, that is why women and sun are similar. So, if you invoke the myth ah frame, the understand the mythological belief system, myth and belief system of the community, then it makes perfect sense similar to what an Indian understanding of the rivers and so on; river is considered a woman.

So, often most of the rivers are considered as the as Devi, as mother and mother goddess or something. So, similarly they have an understanding of the sun as some as the wife of the of moon. So, this is where faith and belief system frame makes sense of putting the sun and the women in the same category. Similarly, sun and fire are of course, the similarity is evident because this is and dependent on experience.

So, both of them are they emit fire, they create heat and they can be dangerous and so on. So, sun and fire are fine. So, now, we already have made sense of women, sun, and fire being together in the same category and then of course, fire and other dangerous things. Other dangerous things like fire is dangerous, similarly other dangerous things are also put together in the same category.

So, this is how fire, sun, and women are get to put together in the same category. Similarly notice that they have also put most birds in the category, same category with women, this is also because, this also invokes the myth belief system because in this culture it is believed that, birds are souls of the dead women. So, women once they die they become birds.

So, that is how women, bird, sun, fire, and many other dangerous things are get to put together in the same category. How do we know they are in the same category? Because they all take the same classifier, because classifiers, the purpose of classifier is to categorize, classify objects in a simple category, in a single category. So, this is how frame the understanding of frame is extremely useful in understanding various different categorizations that are, difficult to understand from one perspective or the other.

Cultural issues again are also another domain where frames come handy, where frames help us understand the differences of opinions, for example. So, issues that we debate, there are so many issues, so many contentious issues in the world today that we debate about. So, there are and often they can makes you can make sense of these debates in terms of the frame within which they are positioned. So, they ultimately, what happens, as we as I had just mentioned a little while ago, that this is where the politicians come into picture. If you look at in fact, the politicians' speech can be used as a very important, very rich source of data in understanding what a frame does.

So, you see two politicians of different political parties will be using the same concept, you will be talking about the same notion, same concept, but choose to use different words to talk about the same thing and create a whole different world around that concept.

And both of them seem equally convincing, it is that is why it is possible, because one politician is using the same concept, putting it in a different way and another politician is using the same concept putting it in a completely different way and both of them seem to be true. So, sometimes you might wonder how can opposite things be true, this is how opposite things can be true, opposite things in terms of abstract understanding.

So, opposite things can be true because you can put the same concept by a clever choice of words and thereby invoking a different frame all together. And this is what we see even at a smaller scale, we do not have to go all the way to politicians, you see everybody does that. So, even the concepts like abortion, women's rights, so democracy, freedom of speech all these are very contentious words in these days and it is not any more simple, and the very reason why they are not simple is because they are put in a very, they are pitched, let us say in terms of different frames.

One very famous one very well known debate that has been going on for quite some time now is the concept of abortion. Now, there are two sides, I am giving you one example as to how this how the debates really pan out. So, that, if we talk about, if you see the debate about abortion, there are of course, there is a lot of noise. But if we just clear the noise out, you will see there are there are primarily two schools of thought, there are primarily two warring sides.

One is what they call pro-life I do not know why they call they call it pro-life because life is at stake in both cases, but in any case one is called pro-life another is called pro-choice. Pro-choice are the people who favor abortion and the that is choice of the woman to do whatever with her own self and for her own protection, for her own life and pro-life is the side that opposes abortion. So, they say that the life of the unborn child is also very very important. So now, how they talk about it? How, what do I mean by. So, the concept remains the same concept remains the, this is the concept.

How do we talk about it, choice of words. So, this is where the choice of words comes in. Choice of words to talk about the same thing, one will use the word 'unborn child', the other will use the word 'fetus' and then the argument goes from there. So, the entire debate surrounds on whether the entity that is growing inside the body of the woman should be allowed to live or should be, you know, terminated medically.

So, this is what the idea of abortion means, but; however, depending on what word you choose to talk about the same objective reality, takes you to a whole new domain of understanding this. So, the moment you talk about an 'unborn child' what we are basically doing is we are invoking the sentimental aspect, the emotional aspect of human life; because the moment you say unborn child we are making it a human affair.

And the moment you use the word child, we have seen that the use of child in many ways, you know for political reasons and for other reasons have a very you know strong way of impacting your opinion. So similarly, here if you use the word 'unborn child' automatically there is a sentimentality attached to it, that is part of human life. So, naturally you will be, you know anyone here hearing this, will be like no, I do not want to kill a child because killing a child is one of the greatest crimes a human can commit.

So, that is why you are using the word unborn child, unborn child is you know cannot protest, cannot talk about himself and cannot protect itself and so on and so forth. On the other hand, if you talk about the same entity as a 'fetus', we are distancing the same entity from the emotional side of the story; we are placing it simply as a biological entity. And thereby, so here we are putting we are using the human life frame and all the sentimentality attached to it.

However, by putting the using the word fetus we are simply putting it in the larger biological domain, which is more or less objective. So, all animals all animals have the same biological cycle, the and then we have by using this we are distancing ourselves from the objective reality of the scenario. So, this is what mean, this is what we mean by the choice of, smart choice of words to create a completely different frame of understanding and thereby debating about it, thereby disagreeing on the same concept.

And there are n number of examples in the world today of all these kinds of things, sometimes and this is exactly where the misunderstandings and the disagreements stem from. I will conclude this section with a with two sentences as and I will leave it to you to interpret them. So, the first one is [sarve bhantu sukhinaha; sarv santu niramayah; sarve bhadrani pashyantu; ma kaschit dukkha bhag bhavet], meaning 'may all become happy, may all be free from illness', basically invoking well-being of every being, not just humans, not just animals, but every being. So, every living thing should be happy and without problem.

Now, if the way once you utter this sentence, the kind of frame we invoke and the consequences of that frame you can easily understand. Now, juxtapose this with the sentence which basically means the same thing in lesser words is 'all lives matter', context is US; US political scenario and you can easily, all of us easily understand what the consequences of invoking this frame would be.

This is where I leave, this particular segment. In the next segment we will see more usage of frames and how frames help us understand, organize, understand and organize and use those understanding in different domains of language use and so on.

Thank you.