Principles and Parameters in Natural Language Prof. Rajesh Kumar Department of Humanities and Social Sciences Indian Institute of Technology, Madras

> Lecture - 18 Sentence: Objects and Verbs

So, we will continue talking about Verbs and Objects. We are looking at verbs and objects in the process of understanding structure of sentences or a structure of a sentence. Out of different components of a sentence, we have seen both the parts namely subject and predicate, we have seen components of a predicate namely verbs and objects and then we have seen the relationship between subject and predicate to be precise subjects and verbs and then we started looking at what is the relationship between subject between verbs and their objects.

We will look at more in terms of structural representation and con structural representation of a sentence at a later.

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## Questions

- How do we describe nature of verb?
- What is an object?
- What is the relationship between Subject, Predicate and an Object?



So, last time we were talking about nature of verb in terms of transitive and intransitive; and we saw that transitivity is a largely responsible for how or why a verb will have an object or will not have an object right and what was the what did we conclude if a verb is a transitive one, then it has an object if it is an intransitive one then it does not have an object right.

And sometimes there are few verbs in languages there die transitive verbs which will

have two objects. Now please pay attention to these numbers of objects and the fact that

they are associated with verbs in the sense that transitivity or intransitivity may be nature

of a verb, and once a verb is transitive or intransitive that is going to stay forever. In the

sense that transitivity of a verb is not dependent on languages, a verb may be may not be

transitive in one and intransitive in the other language if a verb is transitive in language

a, it is going to be transitive everywhere.

Now we are going to see, how why is this valency required why is this association

between object and verbs required and also that the relationship the presence of object is

dependent on verb not on anything else. So, it seems like subject and object what is the

primary difference between a subject and an object besides their position in a sentence.

So, now, now you know about the position of these things in a sentence what do you

think will be a primary difference between a subject and an object anybody?

Student: (Refer Time: 04:30).

Sorry.

Student: No dependents on verbs.

Subjects have no dependents on

Student: Verbs.

Verbs that is every sentence will have a verb and every sentence will have a subject these

are two independent principles, they are not dependent on one another; however, whether

a verb is going to be present in a sentence whether an object is going to be present in a

sentence or not is going to be dependent on the nature of the verb right that is the

primary difference between an object and the verb. We have seen the intransitive

transitive and die transitive nature of verbs and then I have I tried to demonstrate some of

them through.

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## Verbs and Objects Sleep John was sleeping. Go Bill was going home. Come Mary was coming from school. Sit Chris was sitting in a chair. Dance Nancy was dancing. Eat Bob was eating pizza. Read Chirs was reading a novel. Write Liza was wring a letter. Give Tony gave a pen to his daughter. Nancy was teaching Japanese English. 5

Examples to you that verbs like sleep, go, come, sit, dance happen to be intransitive verbs as they do not have objects ok.

And verbs like eat read and write are transitive ones as they require an object and we know the distinction between requirement and not requirement by putting a diagnostic test what was the test?

Student: (Refer Time: 05:55).

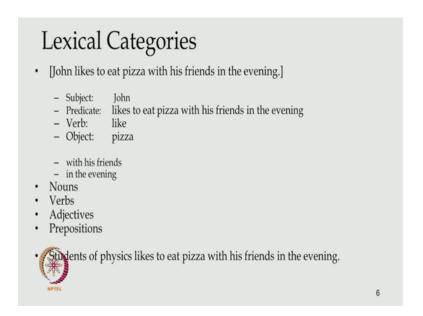
You just need to question the verb with what if the question is a legitimate question do you understand by legitimate question that is if the question sounds, then you are going to get an answer also and that answer is most likely the object of the verb. In other words a answer determines whether the verb will have an object or not ok.

Now how do we argue that the noun home in sentence number two is not an object of this verb. Besides knowing the diagnostic test of what right when we question this verb with what we know that that is not a good question go what right therefore, this will not have an object, this that this verb does not seen to allow an object right? Nonetheless you see something here right and sentence sounds. If someone says I was going right I was going you would want to know where you understand what I am saying when someone says? I was going does not sound like a complete sentence right.

At the same time this does not seem to be an object of the verb. So, what is going on here is an important question for us to understand. I am only underlining this question for you to think about it and then we will we will discuss this question little later. If you look at the second sentence Chris was sitting in a chair if we simply say Chris was sitting it is not as bad, but sounds little bit incomplete and sitting in a chair in a room or in a class gives completion to a sentence right.

So, we will talk about them to remember I have told you that there are some verb some verbs which may pass these kinds of diagnostic tests, but a still may not be a transitive verb or the other way around do you remember this this point what I was what I am trying to say is this diagnostic test may not be completely fool proof, nonetheless it works to a great extent alright, now I want to show. So, in a way I want to put all these discussions in in perspective in an example and see how they work and then carry forward our discussions to a different level.

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So if we have a sentence like this john likes to eat pizza with his friends in eating sounds like a good sentence that is a good sentence. Now for our understanding I have tried to categorize this sentence in different categories that we have been discussing so far right. The subject of the sentence is john everything else likes to eat pizza with his friends in the evening is going to be predicate. The verb of the sentence is like; do you agree with

this or do you think there is something else. Just like first of all let me hear from you and then we talk about this how many verbs do you see in this sentence?

Student: (Refer Time: 10:25).

Two, but if I a if you are asked what is the verb of this sentence what will be the answer? These are not too complicated questions right the fact that there are two verbs and I can see that anyone can see that and a still someone asks you the question what is the verb of this sentence what will be your answer knowing that the answer cannot be both of them.

Student: (Refer Time: 11:01).

Why like and like any scientific investigation every answer must be supported with evidence right answer cannot be I think so, that is not an answer in any science any scientific investigation I am sure you know that you know that right I think so, I believe or I feel are not the answers. So, to make things more precise and these are not too complicated it just requires little bit of attention. We know that every sentence must have a verb right this sentence has one and maybe it has more than one, but when we say every sentence must have a verb it must have a meaning that is the proposition must have a meaning. And if you are deciding that the verb is like or I am telling you the verb is like there must be a reason for that what do you think is the reason should not be too complicated?

Student: (Refer Time: 12:18) my question like what is john like is asked then john likes to eat pizza. So, like is (Refer Time: 12:24).

No not really the answer that I am looking for not really the answer that I am looking for; you were saying somehow we can ask a question where we can involve the subject and then probably get some answer.

Student: (Refer Time: 12:45).

It is simpler than that, I am sorry it is simpler than that go ahead anybody else.

Student: It different what john (Refer Time: 13:00) doing on (Refer Time: 13:01).

We can say the same thing in different words that is the verb which agrees which carries agreement features. Remember we have talked about agreement at great length right that is the verb which carries agreement features. John happens to be the subject because it agrees with john right. If you change the subject if you just make the subject plural you are going to see some changes on the verb right suppose if I have to say john and marry then what will be this what we will how will the verb change.

Student: (Refer Time: 13:41).

John and marry like to eat pizza with.

Student: Their friends.

Their friends in the evening, right.

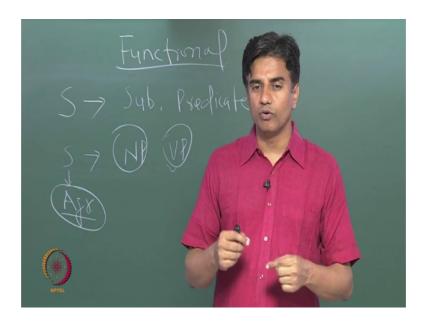
Now, nothing is happening to the verb to eat therefore, that is not the same that is not the verb of the sentence participating in agreement therefore, like is the verb as it happens to participate in the agreement is this is making sense to everybody do you see that it is not too complicated, it just requires a little bit of attention and I am asking you this question only because you have seen agreement features before and you know that there is going to be just one verb in a sentence. When we say there is going to be just one verb in a sentence what we mean is only one verb will be participating in the agreement. In the absence of such an agreement no matter how many verbs you have in a sentence the sentence is not complete, as long as that agreement is taken care of the sentence is complete over done.

Student: Sir (Refer Time: 14:50) step by step. So, should we first identify the subject what should we first identify the verb in a sentence, because when we define subject we said that it is that which agrees with the verb. So, the definition itself says that first identify the verb and then you will be able to identify the subject.

Not really that that the requirement says first you have to identify whether the sentence is fulfilling the requirement of agreement or not, your question is also important for learning language right for acquisition of language how do we learn a language? Do we do we learn to identify categories first either in terms of lexical categories like john mary eat drink pizza do we learn things this way or do we do we learn grammatical categories that is grammatical relations like subjects verbs objects or how what else I mean one convenient answer or depending upon a particular level of discussion, we can say one can say that is not very important at this time one can also say we do not know much about it.

But you can always investigate how does it work therefore, when we try to understand a sentence.

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Which, let us say we call S right and say it has two parts, which has let us say roughly to begin with I am going to say subject and predicate right subject and predicate or we can say we can refine this and say subjects are usually a noun phrase, we can say a noun phrase and a verb phrase meaning everything else is still part of a verb phrase which is predicate right.

To resolve questions like that, when people started looking at feature of a sentence they have to look at things what we are called functional properties of sentence or functional features the abstract things that we do not see and then when we determine that neither subject nor verb is really required really defines a sentence, then people started defining this thing in terms of what was called agreement. So, we really do your answer was very simple, but with that I am sorry your question was very simple.

But with your question I wanted to emphasize I do want to emphasize significance of agreement that in a sentence it is not really important to identify a subject or a verb what is important to identify the agreement and once you see the agreement, then you can see

which are the components that are participating in their agreement thus you understand what is the subject and what is the verb. And a lot of times once we identify a subject a lot of times that subject is going to be a logical subject also grammatical subject, at times depending upon which language we are talking about they may there may be some differences that is in some cases logical subjects may be a different one and a grammatical subject may be a different one.

Nonetheless what is w more striking is all that you know are not going to be in contradiction with one another they do not violate any principle and then. So, we will expand this thing further later. So, let me move on and show you more things. So, next in this sentence what is the object of this end we see so many things after the after verb or associated with the verb, and I am telling you the object is pizza right because it answers the question what if we say eat what right then we get down set pizza, we do not get the answer friends or evening or anything else right.

But I also want to draw your attention that the rest of the sentence the rest of the things in the sentence is not finding any space here, what are they when we say with his friends what is that and in the evening what is that, do you do you see my question do you under my understand my question, we have been talking about the sentence, we have talked about agreement, we have talked about subject, we have talked about verbs and we have now finished talking about objects.

But we see there are several other things in the sentence. So, what can we quickly say without saying much about rest of the things? One way to put this is see what we have been talking about a really required elements of a sentence, they are grammatical relations and they are required elements of the sentence. Having said that we end up saying the rest of the things are not required elements right and that happens to be true that rest of the things give you additional information, but are not really required components for making the sentence therefore, and we I do not want to go and repeat everything you know the required element is an agreement, then the required thing manifestation of agreement is between these 2 and then we know which one is a verb which one is the subject.

And if at all this needs an object or not that is. So, and then we have a sentence. Everything else in the sentence is simply giving us more information, not really and when I say not really required and just giving us information, I do not mean they are not

semantically relevant. I am not saying that we do not need to say those things I am only

saying required with respect required or not required with respect to requirements of

component in a sentence for the formation of a sentence and at the level of eye language

where whether a sentence is good or not here is all that we are talking about. Whether

someone in a conversation needs to give this information that they were eating pizza

with friends or enemies or whoever is not really required information at the level of eye

language that is representation of a sentence here getting the point. So, it is important to

understand what we mean by required elements; require elements simply means required

components in formation of a sentence without which sentence may not be complete ok.

You can drop everything else in the sentence, but if we drop pizza; if we say john likes to

eat with his friends in the evening right. There is some the sentence gives you and if you

test the grammaticality of this sentence with native speakers this tells you that there is

something missing in this sentence; and if it does not sound too odd to us that is because

our languages allows our languages allow dropping of objects, because the moment we

say john likes to eat with his friends right we are the idea is in our the idea in our

languages is the slot of the object is still there it is just conceptually not required; when

we say john likes to eat pizza what is the object of the sentence the verb is like right the

object is not just pizza.

Student: Eating pizza is not.

Eating pizza the whole thing is the object that that is what I meant by damage control and

I said like I said I should have picked up a simpler sentence than that, we can say john

eats a pizza in that sentence what is the verb.

Student: Eat.

Eat and the object is

Student: Pizza.

Pizza here the verb is like. So, the object is going to be what is it that john likes and what

is it that john likes.

Student: Eating pizza.

Eating pizza therefore, to eat pizza is the object of the verb like; it is clarification good

enough do you do you see this this thing. So, when I said in our languages dropping of

an objects is and therefore, these kinds of sentences in English where we drop an object

and sounds to us the reason is if I say john eats pizza with his friends right.

We can say john eats with his friends, the moment we say john eats with his friend we

are conceptually allowing this possibility, that the fact that we are already saying eating

must be eating something right must be eating something and if that something is

understood. So, if it does not manifest overtly still at a conceptual level, the slot of object

stage, but not necessarily we need to articulate that in a language like English that is not

allowed. We must have objects articulated therefore; the dropping of an object is not

allowed in a language like English. It is this clear to you why I am talking about several

things together one why English does not allow to drop subjects I am sorry drop objects

why our languages that is Hindi Tamil Telugu Malayalam many others why our language

is allowed to drop a subject and then why when we speak English a sentence in English

without an object looks to us, alright.

Student: Sir.

Yeah.

Student: Why it allows or it does not allow it is language dependent, we have not

answered why it allows and why it does not allows.

Why it allow and why it does not allow meaning dropping of an object.

Student: Why does a language allow and why does not a language allow.

That is true; it see objects are required by verbs at that is a principle why not why some

languages may allow to drop an object.

Student: (Refer Time: 27:41).

And some languages may not is what is language dependent now then the question was.

Student: Why some languages allow you have not answered the why part (Refer Time:

28:00).

That that is what I was trying I was trying to say I the and this answer may not be a complete answer in some languages like ours, when it is it has a space that is conceptual space to fulfill it fulfill the object in it is absence such as when we say eat the object is going to be something edible right therefore, it is allowed in the sense that it is not to have the subject let me let me give you some (Refer Time: 28:38) kind of examples. So, when we say john likes to play; what we are saying is the requirement of language English is we must say john likes to play football right for our English that let us say Indian English it is to say john likes to play because in our languages it is to say the counterpart of that sentence. The reason why it is allowed the verb transitive verb allowed without a subject we need we are making a distinction that that is not allowed at the conceptual level, the slot of the object is there.

But in reality we drop it because of the following reason then when we say john likes john plays cricket it the sentence possibly could not be john likes john plays pizza. You see the restriction on the sentence, this is called selectional restriction this there is something in language that operates as a principal it is called selectional restriction, which is a particular kind of verb is going to select only particular kinds of objects what we have seen. So, far is whether a verb selection object or not in some cases verbs do not in some cases verbs do. What we have not seen is what are the types of objects a verb is allowed to select like I am giving you example eat cricket, cannot be an allowed sequence even though it is fulfilling the grammatical requirement what is the grammatical requirement? Eat is a transitive verb and it must have an object is are people with me you understand.

Student: (Refer Time: 30:36) this also does not require result to eat will be ok.

No hold on I am coming to that in a moment I am coming to that in a moment.

Student: (Refer Time: 30:40) moving to semantics.

No I am coming to that also hold on let me first finish and I know that you get the point, but I need to make it with clarity. Certain kinds of works require only certain kinds of argument that is only certain kinds of object, when we say eat it the verb the sequence eat cricket is not allowed because it is not fulfilling the requirement of the type of object it needs to select and this requirement is called selectional restriction yes this is clear and you are right the selectional requirement is a semantic criterion, absolutely right no

denying from that fact selectional restriction is a semantic criteria. Now remember few

days ago I was telling you about independence of syntax.

Do you do you remember about independence of syntax, colorless green ideas sleep

furiously where we discussed that a sentence can be grammatical independence

independent of it is semantics, that is even though a sentence does not have a meaning it

can be grammatical. Now I am telling you bringing you bringing something in which

says selectional restriction is an important factor.

Now, what I am trying to say is I am giving you two perspective and two positions and

both are at work in language. The discussion on selectional restriction becomes the

logical argument refuting independence of syntax, those who say independence of syntax

exists can be refuted through selectional restriction not completely, but to a great extent;

however, drop in selectional restriction allows independence of syntax. So, though there

is no contradiction they are in opposition with one another to some extent because

selectional restriction does not allow does not is not a principle only at the level of word

only at the level of verb and it is subject, selectional restriction works at many levels for

example, when we talk about adjectives and noun (Refer Time: 33:20) selection between

adjectives and noun. So, we can say at the moment we have a noun.

Let us say pointer or a computer it can select only certain kinds of adjectives we cannot

say we can say black computer, but we cannot say sweet computer. I hope you get there

get the point we can similarly we can say sweet tea we can we can also say black tea, but

we cannot say.

Student: Fast tea.

Fast tea well we cannot say that also if it is coming from a fast food joint we can say that,

but we you get the point you just have to pick something which is not allowed right

sorry.

Student: Bright tea.

Bright tea, I mean as long as we get the point we are good with that right. So, get the get

the answer of selectional restriction independence of syntax and why two things are

given as examples and counter examples to another, alright. Now coming back to your

thing

Student: (Refer Time: 34:53) john likes to play cricket.

Right.

Student: Sir, but here we do not need cricket, because likes is a likes require a object then

it can be simply two play.

That is true john that is true. So, here also you are fine when we when you say john likes

what to eat, but if we have pizza in the sentence then what we are saying is the whole

chunk is the object; the if pizza was not there then the sentence was ok.

Student: Ok.

Right I like I told you I should have picked up a simpler sentence than that, because we

are not ready for the whole discussion like every by when I say we are not ready we I

mean we need to I need to take you through several other things to reach here.

So, right now what I am saying is pizza is not important here, but there is a reason why it

is important because when we say john likes to eat; to eat is also going to play to eat is a

is a small sentence within it is own right and this is why we are not ready to discuss that

part to eat is a small sentence within it is own right these are miraculous and magical

things in languages and I do not mean to digress from the point, but I cannot leave it

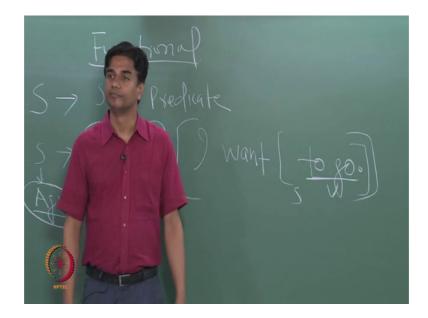
hanging either. So, give me two minutes and then I come back to this dear I am sure all

of us know this sentences like I want to go right simple sentence.

How many sentences do you see here on the board?

Student: (Refer Time: 36:43).

(Refer Slide Time: 36:34)



I want to go right it is it looks like there is one sentence, but if I tell you this has two sentences in it do you do you believe that yes.

Student: Yeah.

So, what are the two sentences in this?

Student: I wanted to.

I want.

Student: To go.

I want and to go you are saying there are two verbs, where are the two sentences. I think at this level you can discuss this much right you are saying there are two verbs and probably you are right about two sentences, but we need to say more to make them two sentences. We are saying the first sentence is not I want is want a transitive verb or not a transitive verb.

Student: (Refer Time: 37:38).

It is a transitive verb because when we say I want something want what. So, just saying I want is not a complete sentence; what is complete sentences I want to go; within that whole thing. So, this is sentence number one what is the object of this want.

Student: To go.

To go right; now this is argued to be an independent sentence by itself what is the object of this verb is not really a verb, because verbs do not become an object and I will I will discuss little bit more on these things later, I promise you this thing is just right now I just want to show you that this is a sentence it is not simply a verb, it is not a noun this is a sentence by itself because the subject of this sentence you know this is when I say sentence I am cutting several things.

Out of this discussion it is not a complete sentence, but it is a sentence and I promise you I will bring you back to this these kinds of questions; and these kinds of questions are important in language because this did tell a lot they give us a lot of theoretically motivated insights in insights and they help us understand language in a much better way the other reason why these things are important is there are such so simple sentences, but they could be so complicated at the level of human cognition. I am saying both and I am saying that knowing very well that we will wait for more discussions on this thing I am saying this is a sentence, but not a full sentence.

So, far this is not a sentence because do you see a subject here no. If I tell you there is a subject here therefore, this is a sentence because when I say I want to go I am basically saying I want I to go; because the possibilities are how do I say I want can I can I say or not I want him to go I want you to go can I say these sentences are not right these are good sentences they are exactly the same pattern I want you to go, I want him to go, I want her to go right (Refer Time: 40:31).

So, when I say I want to go the sentence is I want I to go right the identity of these two, the moment it is matched when I say I want to go the identity of this thing and this thing is matched the principle of economy applies and it is deleted not needed. Cannot be deleted when I say I want him to go because the sentence is completely different, I want him to go thus the sentence is completely different the identity between I and him is not matched it is about a different person therefore, that is stays and this one is deleted, which means which is to say that this slot of the subject is open now we. So, we can say this there is a subject and there is a verb, but where is the agreement there is no agreement between subject and the verb. So, I will come to the agreement part later and this is what I said I will discuss this thing later, right now I can tell you this seems to be a

subject sentence, but not a good not a real sentence by real sentence I mean this sentence will not have an independent ex status outside this big sentence; however, in this big sentence this has an status ok.

(Refer Slide Time: 42:15)

## Phrase structure

- Some words appear to belong together:
  - {The fat monkey} {was jumping {on the roof of this building}}
- Groups of words that belong together are constituents
- The part that determines the properties of the constituent is the **head**, and the constituent can be referred to as a **phrase**: e.g. **noun phrase**

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Similarly, john likes to eat pizza to eat pizza has a different status, it is not a complete sentence by itself. But some have argued the to eat the pizza to eat pizza is the object of the main verb want, but pizza is the object of to eat even though it is not a complete sentence and then there are more discussions required for that. Therefore, that is needed, but right now I can simply say pizza is not the object in our discussion right now what is our discussion what is in our discussion the subject the object is to eat pizza likes what to eat. Even though I feel like I should have picked up a simpler sentence, but I am glad that we picked up that sentence so that we got to discuss something else. I hope things are clear to you can see these are simple sentences are not very difficult to you for us to see we say these kinds of sentences. So, several times every day right, alright.

This sentence is relevant for discussing a couple of other modules of theory couple of other principles of language, which I am coming to very soon. Now we will stop in a couple of minutes, but I want you to see that we are we are heading in a we are heading towards the discussing these things, where the point is and even with the pre in the previous thing when we were looking at subject predicate objects and verb the point is identifying, things in this slide I am only trying to show you grammatical relations ok.

Now, and you see that some elements are required in some elements are not required this is why I have listed with his friends and in the evening something else that we will discuss we. I have a sentence like students of physics this is not a good sentence you

see that what will be the verb students of physics.

Student: (Refer Time: 44:40).

Like to eat pizza.

Student: (Refer Time: 44:42) with their friends.

With their friends in the evening actually I think what I wanted to write this student of

physics so that that is a typo nonetheless what is the subject of this sentence.

Student: Student of physics student of physics.

Student of physics right, right now before discussing anything else, what can you say

about the subject.

Student: (Refer Time: 45:05).

No that is not redundant that is not redundant, redundant is it is not redundant in the

sense that let me first say why do you think it is redundant.

Student: (Refer Time: 45:24) does not changes the (Refer Time: 45:25).

That is not.

Student: Redundant (Refer Time: 45:27).

So, what you are saying is students could be of anything, but someone who wants to

specify student's right for that processing it is not redundant. You see the difference

between redundant and not redundant we are saying the reason why it sounds redundant

to you is because you are used to seeing subjects as once a one little noun right John

Mary, students here we are seeing for the first time or at least we are looking at it for the

first time that the subject is a bigger chunk. I will also show you in under what

circumstances this could be redundant and under what circumstances these is not

redundant, such as in this case it is not redundant we want to specify students of what.

When we say students the students of what right it is not redundant number one. So, all we are un trying to show you through the sentences, a sentence could be bigger chunk I am sorry a subject could be a bigger chunk and rest of the things you have already seen. So, through this we are see, we are looking at the following point it is several words in a sentence seem to form a group and group of words are called constituents the that is simply that is simply to say they are forming one cluster and that is easy to see like you have seen student of physics, in this sentence the fat monkey were jumping on the roof of this building right.

When we say monkey what is the subject; what is the subject of this sentence the fat monkey were jumping on the roof of this building.

Student: That is fat monkey.

The fat monkey the: so anyway this subject is monkey, but the fat and monkey they together seem to form a group right why is the forming a group with monkey right and not watch right. So, what is jumping on the roof of this building is one constituent and even in that bigger chunk, on the roof of this building is another looks like another constituent and then we need when you see on the roof and then of this building these are a smaller chunks right.

On the roof of this building is one chunk and within that of this building is another chunk. The all I am trying to show you is these are these are we see in sentences that words form groups and how they form groups and what is the what is the notion of the whole constituent heads, and then eventually we with through these groups we are trying to go to phrases and constitution of a phrases how do we recognize a phrase is what we are looking at.

So, we will talk about phrases and their constitutions soon. So, that we can come to different principles and discussing sentences like this we stop here.