Basics of Language Science Professor Rajesh Kumar Department of Humanities and Social Sciences Indian Institute of Technology, Madras Lecture 19 Verb and Object

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 a subject and predicate to be precise subjects and verbs. And then we started looking at what's the relationship between verbs and their objects?

We will look at more in terms of structural representation and a structural representation of a sentence a little 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 the nature of verbs in terms of transitive and intransitive. And we saw that transitivity is largely responsible for how or why a verb will have an object or will not have an object, will not have an object. And what was the, what did we conclude?

If a verb is a transitive one, then it has an object. If it has an intransitive one, then it doesn't have an object. And sometimes, there are few verbs in languages; they are ditransitive 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 of transitivity or intransitivity, maybe, nature of a verb. And once a

verb is transitive or intransitive that is going to stay forever. In the sense that, transitivity of

your verb is not dependent on languages. A verb may not be transitive in one and intransitive

in the other language. If a word is transitive in language A, it's going to be transitive

everywhere.

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

objects and verbs required? And also, that the relationship, the presence of object is

dependent on the 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 the sentence. So

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: No dependent on verbs.

Professor: Sorry?

Student: No dependent on verbs.

Professor: Subjects have no dependence on.

Student: Verb.

Professor: 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. That is the

primary difference between an object and the verb.

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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 Teach Tony gave a pen to his daughter. Nancy was teaching Japanese English.

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We have seen the intransitive, transitive, ditransitive nature of verbs and then I have tried to demonstrate some of them through examples to you that verbs like sleep, go come, sit, dance happened to be intransitive verbs, as they do not have objects. 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: What.

Professor: 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 okay, then you are going to get an answer also, and that answer is most likely the object of the verb.

In other words, the answer determines whether the verb will have an object or not. 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.

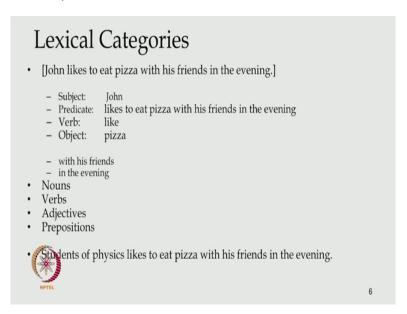
When we question this verb with what we know that that is not a good question. Go, what? Therefore, this will not have an object. This verb does not seem to allow an object. Nonetheless, you see something here and the sentence sounds okay.

If someone says, I was going, I was going, you would want to know where. You, you understand what I am saying? When someone says, I was going does not sound like a

complete sentence, at the same time, this does not seem to be an object of the verb. So, what is going on here is an important, important question for us to understand. I am only underlining this question for you to think about it and then we will discuss this question a 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 a little bit incomplete. And sitting in a chair in a room in a class gives completion to a sentence. So, we will talk about them too. Remember, I have told you that there are some verbs, some verbs, which may pass these kinds of diagnostic tests, but they still may not be a transitive verb or the other way around. Do you remember this point? What I am trying to say is, this diagnostic test may not be completely foolproof. Nonetheless, it works to a great extent.

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Now, I want to, so in a way, I want to put all these discussions in prospective, in an example, and see how they work and then carry forward our discussions to a different level. So, if we have a sentence like this, John likes to eat pizza with his friends in the evening. 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. The subject of the sentence is John, everything else likes to eat pizza with his friends in the evening is going to be the predicate.

The verb of this 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: Two?

Professor: Two. But if you were asked what is the verb of this sentence, what will be the answer? These are not too complicated questions. The fact that there are two verbs, and I can see that anyone can see that and 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: Like.

Professor: Why like? And like any scientific investigation, every answer must be supported with evidence. The Answer cannot be I think so. That is not an answer in any science, any scientific investigation. I am sure you know that. I think so or I believe or I feel are not the answers.

So, to make things more precise, and these are not too complicated, it just requires a little bit of attention. We know that every sentence must have a verb. The 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.

So, and if you are deciding that the verb is like or I am telling you the word is like, there must be a reason for that. What do you think is the reason? Should not be too complicated.

Student: The question is what does John like and Marry. John likes to eat pizza, so like is the verb.

Professor: No, not really the answer that I am looking for. Not really the answer that I am looking for. You are saying, somehow, we can ask a question where we can involve the subject, and then probably get some answer.

It is simpler than that. I am sorry, it is simpler than that. Go ahead. Anybody else?

Student: Despite what John is doing or?

Professor: 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 a great length. That is the verb, which carries agreement features. John happens to be the subject because it

agrees with john.

If you, if you change the subject, if you just make the subject plural, you are going to see

some changes on the verb. Suppose if I have to say, John and Mary, then what will be this,

how will the verb change? John and Mary like to eat pizza with.

Student: With their.

Professor: Their friends in the evening.

Now, nothing is happening to the verb to eat, therefore, 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 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, if you look at it step by step, so should we first identify the subject or should we

first identify the verb in a sentence? Because when we define a subject, we say 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.

Professor: Not really, 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 for acquisition of language. How do we learn a language? 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 learn grammatical categories that are grammatical

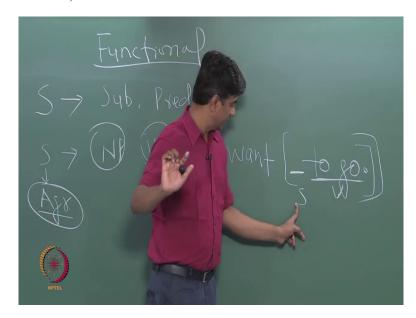
relations like subjects, verbs, objects or how, what else?

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?

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Therefore, when we try to understand a sentence, which, let us say we call S and say, it has two parts, which has, let us say, roughly to begin with, I am going to say, subject and predicate, 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.

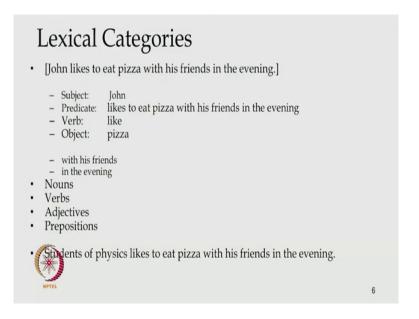
To resolve questions like that, when people started looking at features of a sentence, they had to look at things that were called functional properties of sentences or functional features, abstract things that we do not see. And then, when we determine that neither subject nor verb is really required, really defines the sentence, then, people started defining this thing, in terms of what was called agreement.

So, we really, 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 the significance of agreement, that in a sentence, it is not really important to identify a subject or a verb, what is important is to identify the agreement. And once you see the agreement, then you can see, which are the components that are participating in the 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 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, we will expand this thing further, later. So, let me move on and show you more things.

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So, next in the sentence, what is the object of the sentence? We see so many things after the verb or associated with the verb? And I am telling you, that the object is pizza, because it answers the question, what, if we say, eat what? Then we get the answer, pizza. We do not get the answer, friends or evening or anything else. But I also want to draw your attention that the rest of the sentence, 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 see my question? Do you understand my question? We have been talking about a sentence, we have talked about agreement, we have talked about subjects, 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 the rest of the things? One way to put this is, see, what we have been talking about are really required elements of a sentence. They are grammatical relations, and they are required elements of a sentence. Having said that, we end up saying the rest of the things are not required elements, 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 I do not want to go and repeat everything, you know, the required element is

an agreement. Then the required manifestation of agreement is between these two 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 all, and then we have a sentence.

Everything else in the sentence is simply giving us more information. Not really, but 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 or not required with respect to the requirements of components in a sentence

for the formation of a sentence and at the level of I-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

I-language that is representation of a sentence here. Getting the point? So, it is important to

understand what we mean by required elements. Required elements simply mean required

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

There are 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 allow dropping of objects,

because the moment we say, John likes to eat with his friends, 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. The

object is not just pizza.

Student: Eating pizza is the object.

Professor: Eating pizza, the whole thing is the object. 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. John eats a pizza, in that sentence what is the verb?

Student: Eat.

Professor: Eat, and the object is?

Student: Pizza.

Professor: 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.

Professor: Eating pizza. Therefore, to eat pizza is the object of the verb like. Is this

clarification good enough? Do you see this thing?

So, when I said in our languages the dropping of an object is okay, and therefore these kinds

of sentences in English, where we drop an object and sound okay to us, the reason is, if I say

John eats pizza with his friends, 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, must be eating something and that

something is understood.

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

Is this clear to you? Why am I talking about several things together? One, why English does

not allow to drop subjects. I am sorry, drop objects. Why are our languages Hindi, Tamil,

Telugu, Malayalam, and many others, why our languages allow us to drop a subject, and then

why when we speak English, a sentence in English without an object looks okay to us. All

right.

Student: Sir?

Professor: Yeah.

Student: Sir, why it allows or it does not allow, it is language dependent? You have not

answered why it allows or why it does not allow.

Professor: Why it allows and why it does not allow meaning dropping off an object?

Student: Yeah. Why does a language allow? Why does not a language allow?

Professor: That is true. It sees, objects are required by verbs, that is a principle, why, not why some languages may allow to drop an object.

Student: And some might not.

Professor: And some languages may not be what is language-dependent. Now, then the question was?

Student: But why some languages allow and why, you have not answered the why part of it.

Professor: That is what I was trying to say. This answer may not be a complete answer. In some languages, like ours, when it has a space, that is conceptual space to fulfill it, fulfill the object in its absence, such as when we say eat, the object is going to be something edible, therefore, it is allowed in the sense that it is okay not to have the subject.

Now, let me give you some bizarre 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. For our English, let us say Indian English, it is okay to say John likes to play, because in our languages it is okay to say the counterpart of that sentence.

The reason why it is allowed is the verb, transitive verb is 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. That when we say John likes John, 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. There is something in language that operates as a principle called selectional restriction, in which a particular kind of verb is going to select only particular kinds of objects. What we have seen so far is whether a verb selects an 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 the verb is allowed to select? Like I am giving you an 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. Are people with me? You understand?

Student: Sir, then this also does not require bizarre two it will be open.

Professor: No no, no hold on. I am coming to that in a moment.

Student: And sir, we are moving into semantics.

Professor: 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 verbs require only certain kinds

of arguments that are only certain kinds of objects. 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. This is clear. And you are

right, the selection requirement is a semantic criterion. Absolutely right, no denying from that

fact. Selectional restriction is a semantic criterion.

Now remember, a few days ago, I was telling you about the independence of syntax. Do you

remember about the independence of syntax? Colorless, green ideas sleep furiously, where

we discussed that a sentence can be grammatical independence, independent of its 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, dropping 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, is not a

principle only at the level of the verb, and it's object, selctional restriction works at many

levels.

For example, when we talk about adjectives and nouns, selection between adjectives and

noun. So, we can say, the moment we have a noun, let us say pointer or a computer, it can

select only certain kinds of adjectives, we can say black computer, but we cannot say sweet

computer. I hope you get the point.

We can similarly, we can say sweet tea, we can also say black tea, but we cannot say.

Student: Fast tea.

Professor: Fast tea. Well, we cannot say that also. If it is coming from a fast-food joint, we can say that, but you get the point, you just have to pick something which is not allowed. Sorry.

Student: Bright tea.

Professor: Bright tea. Yeah, I mean, as long as we get the point, we are good with that right. So, you get the answer of selectional restriction, independence of syntax, and why two things are given as examples and counterexamples to one another. Now coming back to your thing.

Student: While you say, we think John likes to play cricket.

Professor: Right.

Student: Sir, but here we do not need cricket, because likes are, likes require an object, then it can be simply to play.

Professor: Yeah, that is true, John that is true. So here also you are fine. 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.

If the pizza was not there then the sentence was okay.

Student: Okay.

Professor: Right. Like I told you I should have picked up a simpler sentence than that, because we are not ready for the whole discussion. Right away when I say we are not ready, we 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 small sentence within its own right and this is where we are not ready to discuss that part.

To eat is a small sentence within its 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. I am sure all of us know the sentences like, I want to go, simple sentence.

How many sentences do you see here on the board? I want to go. It looks like there is one sentence. But if I tell you this has two sentences in it. Do you believe that?

Student: Yes.

Professor: Yes.

Student: Yes.

Professor: So, what are the two sentences in this?

Student: I want to.

Professor: I want?

Student: To go.

Professor: And to go, no. You are saying there are two verbs. Where are the two sentences? I think at this level, you can discuss this much. 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 transitive

verb or not a transitive verb?

Student: Transitive verb.

Professor: It is a transitive verb, because when we say I want, I want something, want what? So just saying I want is not a complete sentence. What are complete sentences I want to go? Within that whole thing, so this is sentence number one. What is the object of this verb want, to go.

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 discuss a little bit more on these things later. I promise you this thing. Just now, 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. 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, this, these kinds of questions. And these kinds of questions are important in language because they tell a lot, they give us a lot of theoretically motivated insights, insights and they help us understand language in a much better way. The other reason why these things are important is because they are such 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 say or not I want him to go.

I want you to go. Can I say these sentences or not? 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. So, when I say I want to go, the sentence is I want, I to go. 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, the sentence is completely different, the identity between I and him is not matched, it is about a different person. Therefore, that stays and this one is deleted, which is to say, that this slot of the subject is open.

Now, we can say that 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 sentence, but not a good, not a real sentence. By real sentence I mean, this sentence will not have an independent status outside this big sentence. However, in this big sentence this has any status.

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

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 that 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,

I can simply say pizza is not the object in our discussion right now. In our discussion, the

and then there are more discussions required for that, therefore, that is needed, but right now,

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 I picked up that sentence so that we got to discuss something else. I hope things are clear to you? You can say they are simple sentences and not very difficult for us to see. We say these kinds of sentences several times every day. This sentence is relevant for discussing a couple of other modules of theory, a 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 heading towards discussing these things.

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Lexical Categories

• [John likes to eat pizza with his friends in the evening.]

- Subject: John

- Predicate: likes to eat pizza with his friends in the evening

Verb: likeObject: pizza

- with his friends

in the evening

Nouns

Verbs

Adjectives

Prepositions

· Sindents of physics likes to eat pizza with his friends in the evening.

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Where, the point is, and even with the, 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. Now, and you see that some elements are required and 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: Like.

Professor: Like to eat pizza.

Student: With their friends.

Professor: With their friends in the evening. Actually, I think what I wanted to write is student of physics. So that is a typo nonetheless. What is the subject of this sentence?

Student: Student of physics.

Professor: Student of physics. Now before discussing anything else, what can you say about the subject?

Student: Physics is quite redundant.

Professor: 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: Because even if it is off Math of English it does not change the category of that sentence. So redundant is.

Professor: So, what you are saying is students could be of anything. But someone who wants to specify students, 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 one little noun, John, Marry, 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 under what circumstances this could be redundant and under what circumstances these are not redundant. Such as, in this case, it is not redundant. We want to specify students of what? When we say students, students of what? It is not redundant, number one.

All I am trying to show you through this sentence that a sentence could be a bigger chunk. I am sorry a subject could be a bigger chunk, and the rest of the things you have already seen. So, through this we are seeing, we are looking at the following point, that several words in a sentence seem to form a group, and the group of words are called constituents, that is simply to say they are forming one cluster and that is easy to see.

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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

Like you have seen the students of physics, in this sentence, the fat monkey was jumping on the roof of this building. When we say monkey, what is the subject? What is the subject of this sentence, the fat monkey was jumping on the roof of this building?

Student: The fat monkey.

Professor: The fat monkey. So, in a way the subject is monkey, but the fat and monkey they together seem to form a group. Why is forming a group with monkey and not watch? 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 that looks like another constituent and then when you see, on the roof and then of this building, these are smaller chunks.

On the roof of this building is one chunk, and within that of this building is another chunk. So, all I am trying to show you is, these are, we see in sentences that words form groups. And how they form groups and what is the notion of the whole constituent, heads and then eventually through these groups we are trying to go to phrases and constitution of phrases that how do we recognize a phase 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 discuss sentences like these. We stop here.