Appreciating Linguistics: A typological approach Dr. Anindita Sahoo Department of Humanities and Social Sciences Indian Institute of Technology, Madras

Lecture – 09 Morphology Continued

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Hello, hi everyone, welcome to this session of Appreciating Linguistics: A typological approach. If I can help you to recall where we were, we were talking about Morphology. And why are we talking about morphology because the next session is going to be on morphological typology.

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Background concepts

- · Phonetic/phonological information
- · Lexical structure information
- · Syntactic information
- Semantic information
- Pragmatic information
- e.g. bake (beik) v. baked, baking.
- 1. to cook, esp. in an oven, with dry heat.
- 2. To harden and dry in or as if in an oven
bake pottery>- n. A social gathering as which baked food is served, ---- bak'er n.



Considering it is going to be different types of morphemes and other stuff that we will discuss, you need to know what morphology is all about in the broader discipline called linguistics. We did discuss why morphology is important and how it is related to the words, the most basic or the rudimentary unit of a sentence and then if I remember it correctly we stopped at the discussion when we were talking about what sort of information do you get when you encounter a new word.

Let us say we looked for a word called bake. When you are trying to find out the related information of bake in a dictionary or in a thesaurus or anywhere, you are going to encounter the information related to different levels. What are the different levels or domains? That will be the phonetic domain, the lexical domain, syntactic domain, semantic domain and pragmatic domain and this is the example I discussed.

When you are talking about the phonetic domain or the phonological domain for that matter, bake will have a /b/ sound, /ei/ sound and then /k/ sound. As far as the lexical structure information is concerned, it could either be considered as a verb with an -ed inflection or -ing inflection.

Considering this is a verb to begin with, it can be inflected to mark perfective aspect or to mark imperfective aspect. If these words like perfective and imperfective sound difficult to

you, let me just briefly talk about it. When you are marking the perfective aspect, that means the action is already done, it is completed, it is finished in a given period of time or at a point of time and when you are marking the imperfective aspect, that means the action is going on; it is yet to come to an end.

That is why bake can either be inflected to baked or it can be inflected to baking. But whether it is baked or baking it is going to remain as a verb. So, if it begins with the verb form, baked could also be an adjective, baking could also be a gerund, but these are different things. If you begin with baked as a verb, the inflected forms are going to be like this. Then we are trying to figure out what could be the semantic information associated with it. Primarily baking is cooking, but this is a specific kind of cooking; you are cooking it in an oven with dry heat. So, that is what we need to remember when we are thinking about baking and syntactically I mentioned it can be used as a VP or a verb phrase. It can also be used as an adjectival phrase, depending on the situation that it is put.

And in case of pragmatic information, it can also have non-literal sense of interpretation. When you say a social gathering at which baked food is served; that means, you are referring to a baker. In this case, there are different ways by which it can be referred to pragmatically in the discourse. So, these are the related information that you may infer whenever you encounter any word, be it old or new. And this is just not related to English, it can be extended to any other language. That is why I want you to look for the words in your own language and take it as an assignment to find out with any word that you write or read or speak, what could be the possible phonetic, lexical, syntactic, semantic, pragmatic information you infer.

Background concepts

- · What are words?
- What are the basic building blocks in the formation of complex words?
- · How are more complex words built up from simpler parts?
- How is the meaning of a complex word related to the meaning of its parts?
- How are individual words of a language related to other words of the language?

With this information about words, let us see some more background concepts. So, what are words? We have already found out that they are mainly combination of letters in a logical form which should have a meaning. But besides that, only one letter can also make a word. For example, the English thing I have already discussed, that is I, the first person singular number. It is just one letter, yet it is a word.

So, that is how you need to understand when I ask you to define the term called word. Then there is the second question that should catch your attention, what are the basic building blocks in the formation of complex words? Before we go to the building blocks and other stuff, we need to find out what is a complex word. Why would I say a particular word is a complex word? What is that complexity involved in it? Can you think about it? Any idea? So, maybe you should actually think about it before I explain the concepts of complexity of a word.

Keep that in mind. This is a question I am going to take it up in a while. Then the next question is how are more complex words built up from similar parts? Let us say, we have a certain number of units and using those units as the building blocks, how we are going to build more complex words? When I say more complex words, the number of parts are more.

So, instead of 2, we can have a 3, we can have it 4, we can have a 5; it is up to us and then the next question that you should have in mind is what is the meaning of a complex word related to the meaning of its parts? Do you think a complex word and its parts always have a correlation or are there words which would be made of certain parts which do not have any connection with the meaning of the word as a whole? That is also possible. We will see that in a while. And finally, the last question that I want you to think about is how are the individual words of a language related to the other words of a language?

If I say a word like 'poor', do you think an individual word 'poor' would have some kind of relation with the word 'poverty'? Or the word like let us say 'response' will have some connection with the word 'responding' or for that matter do we have any connection with "brave" and 'bravery'? These are the questions that we are going to talk about; how the building blocks are kept together to create new words.

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Understanding Morphology

- A word is an arbitrary pairing of sound and meaning. (??????)
- · No distinction between words, phrases and sentences.
- . There are words which do not have any meaning.
- · Not all sound sequences are words and not all sound sequences that NATIVE SPEAKERS would identify as words have meanings.
- · The NATIVE SPEAKERS have an intuition what is a word and what is not?

This is another slide I would like to skip because I have already discussed it in the previous class.

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Understanding Morphology

- · Words: Simple and complex
- The basic part of a complex word- that is, the different building blocks that make it up- are called morphemes.
- · Morphemes are the minimal units of word building in a language.
- Cannot be broken down any further into recognizable or meaningful parts.
- e.g. a nadder -> an adder a norange -> an orange a napron -> an apron



I would go to the simple question that I asked in the very beginning. How would you identify the complexity of a word? Why would you call a particular word a simple one and why would you call a word as a complex? Or for that matter, I will bring in another term, that is a compound word. Do you think these are the questions you actually should pay attention to? Do you think the languages that you speak, it has simpler words, it has more complex words and it has compound words?

What are compound words we will find it out later. Do you think there is any difference between a simple, a complex and a compound word in English, which is the language of our reference, but otherwise the language that you speak at home or the languages other than English, that you are comfortable with, do you think they are also going to be having simple and complex words in their repository?

Then obviously, the question that you need to ask yourself is what are the building blocks that you have when you are thinking about a word in your given language? I would like you to let me know what are the languages that you speak at home; maybe during the interaction process or some live sessions we are going to talk about it. Do remember all these discussions I am bringing in, these are primarily in English, but then I would leave it up to you to find out how all these processes that I am discussing here, work in your language.

So, that is about the simple versus complex word. Basically we need to figure out what are the building blocks that we use to build up complex words. Now with this background information, I would like to introduce a linguistics discipline-specific jargon which is called morpheme. If you already had some basic level linguistics course, you must know what a morpheme is. If you have never done any linguistics course and then you are taking up this course as the first encounter with linguistics, then I would explain it a bit more for you.

The tiniest definition that I can write is the minimal, distinctive unit of a word which is actually meaningful or if you can put it in this way, morphemes are the minimal, meaningful, distinctive unit of a word. So, there are three words here if you remember, can you recall and think about it? I did say it has to be minimal, then the second word that I used is it has to be meaningful, then the third word that I used it is distinctive, then I said unit of a word.

These are the three most important words we need to understand when we are trying to figure out what a morpheme is. So, when I utter the word minimal, that means, I am reiterating it or I am emphasizing on the smallness of the word; it should be the tiniest part of this construction. So, that is going to be minimal.

Then after that, the next phrase comes meaningful. So, what is meaningful? Meaningful is going to be when you encounter such a unit, it must have some meaning associated with it; either in a dependent manner or in an independent manner that we will see later, but then it must have some meaning associated with it and when these kinds of morphemes get associated with the main word, they entirely change the meaning of the main word. That is going to be the minimal, meaningful and then you have distinctive.

When I said distinctive, I am focusing on each independent unit of this word. You should actually be able to distinctively identify this is a unit a, this is a unit b. When it is a and b or x and y, you should be able to distinguish them separately, then only you are going to call that unit of a word as a morpheme. Remember morphemes are the minimal, meaningful, distinctive unit of a word. So, now, let us take a very simple example tree.

This is my pet example actually, I always bring this one to the class because it is very simple. When you say tree, can you find out what is the minimal unit of tree? That means, when I say minimal, you cannot break it any further; it has to be the tiniest one. So, can you break it? Can you say tra and i? That is not going to be possible.

There is no way by which you can break tree into any other part. Tree itself is the minimal part of this word and is it meaningful? Yes, it does have meaning; tree would be a live plant. So, any kind of plant which has life, we can also call it a tree. We can also call dead tree, that is a different thing, but then tree does have some meaning. Then you have distinctive. So, do you think tree itself is a distinctive unit? Yes, it is.

That means, tree, which is a word, also has all the features of being called a morpheme. Now let us go to the next word that is trees. What does it mean? When I say trees, it is mainly plural of tree; many trees around. So, one single tree and then many plural trees. Now, my question for you would be trees as a word, is it the minimal unit or you can actually break it into pieces?

I am giving you a second to think about it. When I said trees, what do you do? I am sure some of you must have got an idea that it is a word which can be divided further; that means, the word itself is not the minimal unit. If I talk about minimal unit, I have to stop it over here. Let us try to parse it or let us try to break it into pieces to find out how to identify the minimal units.

We were talking about tree and trees. Let us try to figure out how we are going to identify the morphemes here. If I am writing the word let us say tree and then the other word is trees; so when you are talking about the first word, there is no way by which you can break it into pieces. Can you write or can you say tree, t r and e that is not possible. So, this is minimal. This also has its own meaning and this is also a distinctive unit. Now let us come to trees.

Tree actually stands true for all these three features; tree is minimal, tree is meaningful and tree is distinctive. However, when you look at trees, is it minimal now? No, why it is not minimal? Because trees as a word you can actually break it into two pieces. Would you consider it as meaningful? Yes. So, it is meaningful. Is it distinctive? Yes.

Now compare this and this. So, this trees as a whole like the entire word does not qualify to be a morpheme in that sense, because it has to be broken into some more parts to identify that or to recognize the morphemic status of it. This is definitely a word, but this is just not one morpheme. You cannot call trees as one morphemes; that means, there are more morphemes here.

How to break that? Now I will basically put it over here. So, I am writing trees again. Let us see whether we can break it into two different parts. Yes, tree and -s. So, -s is going to be one morpheme. This is morpheme 1, this is morpheme 2. So, the morpheme 1 why would I call it a morpheme? Because it is minimal, it is meaningful, it is distinctive and when it is -s, it is also minimal, it is meaningful and it is distinctive too.

So, trees as a word has two morphemes, morpheme number 1 and morpheme number 2. So, now, tell me do you think these two morphemes that trees has, are they similar or are they different? Take a few seconds and think about it. Do you see any difference between these two morphemes? How would you find out when you say tree as a morpheme? You can clearly see that it can stand alone, it does not need anyone else to be meaningful; it is meaningful independently. This also has some meaning, but this has an independent meaning.

So, trees; tree as a word has independent meaning and -s as a morpheme does not have an independent meaning. It is dependent on the tree to make it a completely meaningful word. So, if you compare them, tree would be called a free morpheme; it does not need anyone, it is free, it is liberated in that sense. It does not require anyone's help to stand, it is self-sufficient. However, the morpheme -s is not independent; it is dependent, it is not free, it is bound and it definitely has some semantics associated with it or it has some meaning, but the meaning here is not independently meaningful, it must have some dependent meaning.

So, when it is added to tree, it changes the meaning of the whole word, it makes it singular to plural, but it cannot stand independently. That is why tree is a free morpheme, in other words, you can call it independent morpheme and -s is a bound morpheme or you can call it a dependent morpheme. This is the simplest example that I can give. We will try more complex ones and when we try the more complex ones, I expect you to be a little more attentive. But before that, I will go to another simple example.

The other simple example that I can give you is let us say book.

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So, I am writing book. Is it a word? Yes. What do you think it is, a noun or a verb? Most of you would say it as a noun because that is how we generally use it in the discourse. Quantitatively book is used as a noun more often than book as a verb, but book can also be a verb. So, that is why the meaning of book is not context-free.

So, sometimes it might mean just a reading material, a printed form sometimes it could be in an electronic form too. It can also be considered as a verb, when you say I booked my tickets to Bubaneshwar yesterday so; that means, you are not reading your ticket, you actually booked a ticket. So, in that case its book is a verb; please book your tickets as soon as possible otherwise the prices are going to high up.

So, in that case, that is a verb. But when you say I am reading a book, it is a noun. We have already checked tree as a noun. Now, we will check book as a verb. Considering one noun discussion we are done, we will do a verb discussion now.

What do you think book as a verb is, since we just discussed the perfective and imperfective aspect of the words? Can you tell me if I add the perfective marker to it, what would it be? It would be booked and if I add the imperfective marker, it is going to be booking. Now let us try to play around with the morphemic analysis of these two words.

What did we remember what is the morpheme, if you can recall? What are the three important words that I referred to when I discussed morpheme. It must be meaningful, before that it must be minimal and it also should be distinctive. So, what do you think booked and booking are as words? What are the morphemes or what are the units in these words which can be called as morphemes?

We are going to break it here for booking and we are going to break it here for booked. Booked as a whole is not the minimal unit; it can actually be broken further. Booking as a word is also not a minimal unit; you have to break it further. So now, we have one morpheme here, one morpheme here, one morpheme here, one morpheme here. So, this is 1 2 1 2. We have to apply the same formula that we did for trees.

I will not call it morpheme to begin with. I will call them units. Unit 1 unit 2 unit 1 unit 2. So, let us try the first one booked with the unit 1. Do you think book is minimal, yes or no? Yes, because it cannot be further broken, you cannot bo and no that does not work.

So, book is minimal, book is meaningful, book is also distinctive, book has a meaning and book also has a distinctive feature. So, this would be considered as one morpheme. Now let us go to the second morpheme in the same word that is booked -ed. So, what do you think about -ed? Do you think this is a minimal unit or you can actually break it even further? No, you cannot.

For -ed you cannot say /e/ and /d/; that is not possible. So, -ed is going to be the minimal unit. Does it have some meaning? It may not have independent meaning, but it does have some meaning. The moment you hear the word -ed, you generally tend to assume that this must be the past tense form of something.

That is why -ed as a morpheme does have some inherent semantics or I can say inherent meaning and then do you think that is distinctive? Yes, that is distinctive. Because you can keep it separate, though not independent, but then you can actually consider it or you can accept it as a distinctive unit. Booked as a word or as a verb, will have two morphemes: book and -ed. Now come to booking which is the imperfective aspect as I told you. These are the

two things you need to remember because if you scan through the linguistics literature, you will find a lot of reference to perfective imperfective aspects.

Why do we call it aspect? Because a lot of South Asian languages do not have a clear distinction of the tense marking, rather the aspect is more important for us. So, when it is booked, that is perfective aspect; when it is booking, this is imperfective aspect. Why imperfective? I just mentioned a while ago. The action is continuing let us say I am booking the ticket, I am online I am booking in IRCTC train ticket or I am booking a flight ticket.

I am booking means the action is yet to come to an end. The temporal spectrum that we have, is not at one point, rather it has been going on for a period of time. So, that is going to be booking. What do you think is -ed for booked? And -ing for booking, do you think they have the similar kind of relation?

What -ed is for booked, the same is -ing for booking. You know why? Because the root word or the main morpheme, that remains the same in both the cases. When you say booked, booking is done. When you say booking, booking is going on. So, in this case if we consider them as verbs to begin with, then -ed and -ing seem to have similar features. What are the similar features? They are the minimal units; you cannot break them. Just like you cannot break -ed to e d, similarly you cannot break -ing to i n g. You cannot do that.

That is why they are minimal units, no division further. Then; obviously, they have some meaning associated with it. If not the independent meaning, they do have some associated meaning, inherent semantics, that is the word I generally use most of the time. So, I am going to use it more often in the upcoming units.

It is going to be inherent semantics. So, by default -ing has a certain meaning and what is that meaning? Continuity. The meaning of continuity and the meaning of imperfective aspect that is associated with that. So, both -ed and -ing they are minimal, they are meaningful and they are also distinctive.

That is why they have all the basic features of being called as a morpheme. So, in this case we realize that -ed and -ing are similar kind of morphemes and book is a different kind of morpheme just like tree and -s. So, when we were analyzing trees, tree was a free morpheme

and -s was a bound morpheme. That is what we discussed, isn't it? Why is tree a free morpheme? Because it can stand independently. Why is -s a bound morpheme? It cannot stand independently though it has some meaning associated with it. To get a complete meaning, it has to be associated with the main word. That is why these are two different units altogether or two different kinds of morphemes altogether. So, one will have dependent status, the other one will have independent status. So, here, book is a free morpheme, -ed is a bound morpheme and in a word like booking, book is a free morpheme and -ing is the bound morpheme.

Now let us see how we are going to understand the phonetic aspect of morphology. This is what I discussed if you refer to the point number 3, I just said it is a minimal unit. So, it cannot be broken down any further into any recognizable or meaningful parts.

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e.g. a nadder -> an adder / a norange -> an orange / a napron -> an apron /



Let us compare this, this and this. When you say a nadder, it is actually an adder. In a nadder you cannot say that a is a distinctive unit and nadder is a distinctive unit, this does not work in that way. Because nadder does not have any meaning, rather a and n they have to come together to form a logical unit or a meaningful unit. So, an is a morpheme and adder is another set of morpheme. We will go to it later, but here we are trying to figure out what is

the meaningful part. When you say a nadder, there is absolutely no meaning. Probably a has a meaning because it is an article used in English.

But what is the meaning of nadder? It does not have any meaning. Similar is the case with a norange. What is norange? There is no word called norange in English. So is the story with napron. Napron also does not have any meaning associated with it.

That is why this kind of a division does not contribute to morphemic analysis. Why it will not contribute to the morpheme analysis? Because it does not have any meaning. When we were trying to figure out three basic features of a morpheme, the first one was minimal, the second was meaningful and the third one is distinctive.

Here, probably a can be considered as a distinctive unit, but nadder does not have any meaning. So, the meaning aspect of it has gone missing; which is why, a separate, nadder separate, a separate, norange separate and a separate, napron separate, they do not contribute anything to the understanding of morphemes, rather we have to refer to them as an adder, like somebody who is adding something or something which is adding something into something or we can say an orange, this is just a fruit and I am referring to one single piece of orange. Then I am saying an apron. So, this apron is a garment that we wear when we cook or when we go to the laboratories. So, an apron, an orange and an order these are the ones which would be considered as words and then after that we are going to break it into further pieces.

Now let us look at an adder. I am going to write it over here. So, here is the word adder, which is an interesting word in fact. Do you think this entire unit adder can be considered as one morpheme? No. I assume that all of you have understood by now.

We can actually break it here. We can say add and -er. So, add is going to be a free morpheme because it can stand alone and -er is going to be a bound morpheme. Why would -er be a bound morpheme? It is minimal, it is meaningful, it is distinctive, but the meaning of -er is dependant on the root word. It cannot just stand alone. But do you think orange can also be sort of analyzed following the same pattern as adder? No it cannot be.

You cannot break orange into any part. This whole thing is a morpheme. Apron whole thing is a morpheme because you cannot break it into pieces. In case of an adder, there is one free

one bound. How about orange? There is one morpheme; that is a free morpheme or bound morpheme, what do you think? It would be considered as a free morpheme. Why? Because, it can stand alone.

Similar is the case with apron. It is also going to be considered as a free morpheme because it also does not require anything else to give it or to have its complete meaning. It itself is complete, it is self-sufficient, it can stand alone. So, apron and orange these are the free morphemes, add is a free morpheme, -er is a bound morpheme.

I am putting it in a box. Now we are going to do some more analysis. We have a morpheme add, then we have the morpheme -er, then we have the morpheme orange, then we have apron, then we also have a morpheme an; an can also be called as a morpheme; all of them are morphemes.

But now our question would be to find out what is the relation between a word and a morpheme. Let us do tick- tick-tick and we will try to find out how we are going to understand morpheme and word. We have already defined add as a morpheme.

But do you think it is also a word? Yes, add is also word. Why? What is the definition of a word, if you can recall? A word is a combination of a few letters which has some meaning. So, it also satisfies the definition of a word, it also satisfies the definition of a morpheme. We will put a tick over here, then come to the second one -er, do you think it is a word? No, it will not be considered as a word because it does not give you a complete meaning. It does have some meaning, but that is not a complete meaning.

It is not a word, but it is definitely a morpheme. Morpheme we have already written, but we put a cross for its word status. How about orange, does it have a word status? Yes, it has a meaning, a complete meaning. Does apron have a word status? Yes. So now, let us do some analysis. This set of five examples of morphemes, we call it empirical data set. In this empirical data set of five examples, one is a morpheme, but not a word.

Then the other four are also words, they are also considered as morphemes. So, can you think about and come up with a logical relation between word and morpheme? I will stop it here

for a while and I will give you some time to think about how to draw the relation between a word and a morpheme.