# **Important Prefatory Remark for Students!!**

In the discussions and exercises that follow, you run across key words or phrases in *bold-faced italics*. All of these words/phrases are defined for you in the **Glossary** at the end of each chapter. Importantly, you will be held responsible for all of these words/phrases on the examinations! The first part of all three examinations is a section called **Define and Exemplify**, where you will be asked to provide both a definition and an example on various key words/phrases.

# Chapter One Introduction

### 1. Preliminaries

This course deals with *linguistics*, a discipline that deals with the study of human languages and the human language capacity. In linguistics, we commonly differentiate between linguistic knowledge and the deployment of that knowledge when we use language. The more technical terms we use for knowledge and use are *competence* and *performance*, respectively.

In fact, when we linguists speak of linguistic competence, we do *not* have in mind the kind of knowledge that, say, English teachers might talk about. In English classes, for example, we hear much about things like "comma splices," "topic sentences," "split infinitives,", "run-on sentences" and generally about how we are supposed to write or speak, especially in formal circumstances. The idea would be that we are supposed to be knowledgable about such things. In fact, in linguistics, we find such affairs to be completely uninteresting, and for a simple reason: The object of our inquiry in linguistics is not the knowledge that the "good" speaker of English (or French or Arabic or German or Mokilese) has, or the knowledge that the "educated" speaker has, but the knowledge that makes us *native speakers* of some language.

Now, what makes the linguist's focus on the competence (knowledge) of the native speaker interesting is that this knowledge must be that part of linguistic knowledge that we, as a highly educated persons, share with the completely uneducated; that is, the focus of our inquiry is the knowledge that is manifest both in our knowledge and in the knowledge of a person who has never been to any school at all, cannot read, cannot write, but is a native speaker of English. Because this common level of knowledge—the knowledge that underlies one's classification only as a native speaker—is completely subconscious, including among those who have not attended school, it follows that this knowledge is very likely subconscious in all native speakers. (As we will discover as the course proceeds, we all have a great deal of linguistic knowledge that we are completely unaware of.) And in using the term "competence" in linguistics, we refer precisely to this implicit (i.e., subconscious) level of knowledge that is shared by each and every native speaker of a language.

Note, then, that we include in our focus of inquiry not just the "good" or "educated" speaker's competence, but the competence of the uneducated speaker (again, because both the "good" speaker and the uneducated speaker fully qualify as native speakers, and it is the competence that makes us native speakers that interests us). More generally, in holding such a focus, linguistics can be fruitfully understood not as a *prescriptive* discipline that attempts to tell how we should speak or write, but as a

*descriptive* (or explanatory) discipline that only seeks to understand the very nature of language itself. Linguistics, then, is descriptve/explanatory and not prescriptive.<sup>1</sup>

Again, what we endeavor to discover in linguistics is something about the human linguistic capacity, about competence, as we define it. In this regard, it is useful to realize that this special kind of competence is "in our heads" (obviously), that is, located in our mind/brain. One would think, then, that useful information could be discovered about competence by examining human brains, as one does in that subdiscipline of both neurobiology and linguistics called *neurolinguistics*. And, indeed, a good number of very interesting findings have been made to date in such neurolinguistic studies. However, to date, these findings, as fascinating as they may be, are presently—and will likely remain—at an extremely primitive level.<sup>2</sup>

And so what data—what evidence—can linguists use to learn about the human language capacity for competence? If we can't satisfy our curiosity looking inside human brains, then we have to rely on what we can observe outside. This means that we examine what native speakers know and draw conclusions from these examinations. More particularly, we examine carefully the knowledge of various speakers of the same language and the knowledge of speakers of different languages; we sift though these various sorts of information in order to discover a common core of knowledge: the basic, fundamental knowledge that characterizes the human language capacity.

Let's return, then, to "good" English (or "good" Japanese, etc.) versus "bad" English ("bad" Japanese, etc.). It is vitally important to realize that it just doesn't matter at all whether we examine the English of a "good" speaker or the English of a "bad" speaker; our only criterion for selecting some variety of English (Japanese, etc.) is whether, by looking at this variety, we might discover something interesting about the human language capacity. In fact, as we proceed in the course, we'll discover on any number of occasions that we can discover very revealing things about this capacity by focusing not on the standard variety of English ("good" English), but on non-standard varieties, like the

<sup>&</sup>lt;sup>1</sup> And linguists have been accused of being behind all manner of social ills for this very reason. Some have complained that the descriptive focus of linguistics is (in part) to blame for what they find to be broad decay the use of English. For (cutting) remarks on these "language mavens," see Pinker's *The Language Instinct* (a textbook for this class).

<sup>&</sup>lt;sup>2</sup> And, of course, a contributing reason why these findings are so primitive is because there are ethical constraints on what one can do in the study of humans. Contrast the situation in linguistics to, say, neurobiology. A good example is the research of Hubel and Wiesel on a certain type of brain function in very young felines, for which they won a Nobel Prize. Their work required them literally to butcher young kittens' heads.

English spoken in rural South Texas.<sup>3</sup>

### 2. The Core Areas

Linguists of different stripes study various aspects of the human language capacity. If one were to survey various departments of linguistics across the world, however, we would discover that while only some departments might include a person interested in, say, politeness strategies (what native speakers believe to be polite linguistic and paralinguistic behavior and what not), all departments would include persons interested in *syntax*, *morphology*, *phonetics* and *phonology*.<sup>4</sup> It is for this reason that we call these the *core areas* of linguistics. (In fact, as we'll discover in Chapter Five, there is even good reason to believe that the human mind/brain of the native speaker treats these areas differently than all other areas relevant to linguistic knowledge.)

The core areas are, thus, syntax, morphology, phonetics, and phonology, which we might, *for the moment*, define as follows (see the Glossary!!):

Syntax: The study of the ways in which human languages order words with respect to one another. Hence, while English and Arabic generally place *verb*s before *direct object*s, Japanese and Turkish generally place verbs after direct objects.

<sup>&</sup>lt;sup>3</sup> Indeed, if we were to exclude such non-standard varieties from the focus of linguistic inquiry, we would almost certainly wind up with a misleading and false picture of what comprises the human language capacity.

<sup>&</sup>lt;sup>4</sup> I've listed these as four different areas, and, indeed, different they are. However, you'll discover by looking at the course syllabus that we'll examine phonetics and phonology together to the extent that we'll have only a single examination on them.

- Morphology: The study of the ways in which human languages form words. For instance, while languages like English might form new words by using *prefix*es like <u>un</u>-cover and suffixes like speak<u>-s</u>, languages like Tagalog use *infix*es, where one adds an element to the middle of words, as in *lakad* (= "walk") versus *lumakad* (= "walked").
- Phonetics: The study of the sound inventory of human languages. For example, such study would include, for English, analysis not only of the fact that the "t" sound in <u>tap</u> is different from the "t" sound in <u>butter</u>, but also exactly how these two sounds are produced in the **vocal tract**.
- Phonology: The study of the way that sounds are represented in the mind/brain by native speakers. For example, even though the "t" sound in *tap* is produced in a fashion that is physically different from the "t" sound in *butter*, we perceive these two to be instances of the same sound. The phonologist will want to understand how—and why—the native speaker would perceive physically different sounds as being the same sound.

In this course, then, we'll concentrate nearly all of our efforts on the core areas. In addition, however, we'll also have occasion to look briefly at language acquisition by children. In doing so, we'll be providing the beginnings of answers to two of the three questions posed by the world's most famous linguist, Noam Chomsky<sup>5</sup>, who asked the following:

- 1. What is linguistic knowledge?
- 2. How is this knowledge acquired?
- 3. How is this knowledge used?

In fact, in the course of the study of the core areas, we'll arrive at an insight that is quite similar to that of Chomsky, namely, that the fundamental linguistic capacity of humans must be determined, in large part, by genetic hardwiring—in other words, that our fundamental linguistic capacity is *innately* given by what Pinker calls the *language instinct* (and other linguists call *Universal Grammar*). (Note, importantly, that we are not saying that knowledge of some particular language—English, German, Mokilese, Japanese, etc.—is innately given; rather, the claim is that our capacity to represent language in general is innately given.)

<sup>&</sup>lt;sup>5</sup> Chomsky's many, many books and articles on linguistics are notoriously dense and difficult to understand. Perhaps the least dense of Chomsky's tracts is *Knowledge of Language* (New York: Praeger, 1986). Better still, read Pinker's *Language Instinct*, which makes the same points, but in a style that normal mortals can understand.

### 3. Should one accept innateness?

Innateness claims are no light matter and should not be accepted without convincing evidence. (Indeed, as Chomsky himself points out, anybody who thinks that core aspects of linguistic knowledge are innate without a hard and careful look at the evidence is either extremely naive or just plain foolish.) Obviously, an introductory chapter is not the place to try to convince anybody of the innateness claim; we will return to it in Chapter Five. What we can provide here, though, is a mode of thinking—the mode that led Chomsky (and many other linguists) to his famous conclusion.

To get into this mode of thinking, consider the young child, who acquires competence in her native language between the ages of (around) two and six.<sup>6</sup> The relevant question is this: Could the child acquire this competence without resort to the kind of special, innate capacity that Chomsky refers to as Universal Grammar? To answer this question requires a look at the child's general mental powers and a look at the complexity of what's being learned. We might divide things up in a matrix that differentiates between "competent" and "limited" mental powers on the part of the child and between "simple" and "complex" for what's being learned. The matrix would look like this:

a. Competent mental power, simple material.	b. Competent mental power, complex material.
c. Limited mental power, simple material.	d. Limited mental power, complex material.

Now we can go through the matrix, a. through d.

According to the matrix for cell a, the child has competent mental power, and what's being learned is fairly simple material. In fact, under these assumptions, it doesn't seem very plausible to think that a child would need a special, innate Universal Grammar to acquire competence. We can show this insight adding a 'thumbs-down' ((\*)) in the cell a., indicating that no such special mental capacity is warranted.

I a. Competent mental power, simple material.	b. Competent mental power, complex material.
c. Limited mental power, simple material.	d. Limited mental power, complex material.

Of course, there's only one problem with the scenario painted above: Children's mental powers aren't exactly that outstanding: They don't understand things of a very abstract nature.

Let's go on to cell b: The child has fairly competent mental powers, but the material that's being learned is also fairly complex. Once again, if the child is that competent, then it seems completely reasonable to think that she might successfully acquire complex material, too. In other words, it would

<sup>&</sup>lt;sup>6</sup> That is, by the age of around six (perhaps even earlier), child speakers of a particular language are immediately identified by adults as being native speakers of that language. In that sense, we can say that they have acquired the competence of that language.

be implausible to think the reasonably competent child acquiring complex material needs the linguist's Universal Grammar in order to be successful. This conclusion is depicted in the matrix below:

I a. Competent mental power, simple material.	b. Competent mental power, complex material.
c. Limited mental power, simple material.	d. Limited mental power, complex material.

We've still got a problem, though: The mental powers of children aren't widely known to be that great.

We thus turn to cell c, which includes the more reasonable assumption that the child's mental powers are more limited. In this cell, though, we also imagine that what's being learned is also fairly simple. Again, it seems implausible, under these assumptions, to conclude that Universal Grammar would have to be involved. This is depicted in the matrix below:

I a. Competent mental power, simple material.	I b. Competent mental power, complex material.
𝔅 c. Limited mental power, simple material.	d. Limited mental power, complex material.

So far, in going through cells a, b, and c of the matrix, we've seen that it wouldn't be too plausible to conclude that the child is endowed with Universal Grammar. But now consider cell d, the last cell. Here we assume, reasonably enough, that the child's mental powers are limited, but we also assume that what's being acquired is quite complex. In other words, we've got a child who isn't very "smart," but this child is acquiring material that is quite complex.

Obviously, something is askew here. After all, plain common sense tells us that it takes greater mental powers to acquire complex material. Note, though, that the assumptions built into the matrix don't allow us to escape very easily, so we have to figure out how the child with limited mental resources can acquire competence that is rather complex. In fact, one conclusion that would follow from this situation would be this: The child can perform this uncommon feat because the child is endowed with the linguist's Universal Grammar, which handles language acquisition . In other words, under these assumptions, we can assume that cell d. receives a rather different fill-in than the other three cells. This is depicted below:

𝔅 a. Competent mental power, simple material.	I b. Competent mental power, complex material.
𝔅 c. Limited mental power, simple material.	& d. Limited mental power, complex material.

What we have observed here is a course of logic: By examining possible scenarios that vary on the mental powers of the child and on the complexity of the material being learned, we draw different conclusions about the plausibility of the special, innate capacity. This, then, is the mode of thinking

that we need to adopt in order to understand Chomsky's famous conclusion about Univeral Grammar.

And now the kicker: Our common sense tells us that children really do have rather limited intellectual powers; what we'll learn in this course is that linguistic competence is vastly more complex that most have ever imagined.<sup>7</sup> This, then, is the very scenario depicted in cell d. above.

#### 4. Outline of Chapters

The text is organized into six chapters (including the present chapter). In Chapter Two, we examine phonetics, the sound system and how it is produced and organized. From there, we turn to Phonology, in Chapter Three. It is here that we discover that there is a good deal more to sound systems than simply describing and cataloging sounds. Chapter Four is on Morphology, the study of the smallest meaning-bearing units of language and how the combine together to form what we commonly and informally call 'words'. In Chapter Five, we take a short breather of sorts. Here, rather than looking once more at the details of linguistic knowledge, we reconsider the innateness claim, here to include a much more complete presentation of the logic that leads to the innateness conclusion. Chapter Six, on Syntax, is in some ways on continuation of Chapter Five: While Chapter Five presents the logic of innateness, Chapter Six presents rudimentary ideas on how innateness has been thought to manifest itself in syntactic structure.

<sup>&</sup>lt;sup>7</sup> The logic of this argument along with the associated conclusion is often called the *logical problem of language acquisition*. Chomsky himself—for example, in his *Knowedge of Language* (1986)—has called this *Plato's Problem*, for which he asks the following question: "How can we know so much, given that we have been exposed to so little?"

# Glossary

Affix: A morpheme that must be attached to some other morpheme and that modifies the meaning and/or the lexical category of the stem to which it attaches. Examples include the morpheme *re*-attached to *read* to create <u>reread</u> (and changing its meaning), or the morpheme -*able* attached *read to* create *readable* (changing its lexical category, but not its meaning). See Chapter Four.

Competence: The implicit or subconscious knowledge that all speakers have of the morphology, syntax, and phonology of their native language. All speakers of English know, for example, that *Who did you say where went?* is impossible while *Where did you say who went?* is possible.

Core areas: A reference to the central areas that most linguists concentrate on: syntax, morphology, phonetics and phonology. Some linguists may include semantics among the core areas.

Descriptive analysis: An analysis that seeks to describe (or possibly explain) linguistic facts as they are, not linguistic facts as someone says they should be. Contrast this notion with prescriptive rules.

Direct object: In very traditional (non-linguistic) terms, the noun phrase that [receives the action of the verb" as in *The cat bit <u>the mouse</u>*. In terms employed in linguistic analysis (syntactic analysis), the direct object is the NP sister of V. See Chapter Six.

Infix: An affix that occurs inside of another morpheme. Not observed in English, but found in languages like, for instance, Tagalog. See Chapter Four.

Innateness: Given at birth, ultimately via the genetic endowment; [in-born". Many linguists claim that large portions of our linguistic competence are innate.

Larynx: A structure located in the upper throat region and made of cartilage and muscle. The larynx contains the vocal folds, which may be stretched across the air passage to create the vibration we hear as voice. Commonly known as the []voice box" (and sometimes as []Adam's apple"). See Chapter Two.

Linguistics: The discipline that deals with the study of human languages and the human language capacity.

Logical problem of language acquisition: The logic that shows that linguistic competence must be determined to a significant degree by innate linguistic knowledge. [You know more than you're exposed to." See also Plato's Problem.

Morphology: The area of linguistics that deals with (the study of ) the system of categories and rules involved in the creation of words. See Chapter Four.

Native speaker: A person whom other native speakers immediately recognize as having been raised as a member of their linguistic group (i.e., their speech community).

Neurolinguistics: The area of both linguistics and neurobiology that deals with the study of language in the context of the human brain.

Performance: The use by native speakers of their linguistic competence along with other relevant knowledge of the real world to communicate or to understand communications.

Phonetics: The study of the inventory and the physical structure of the sounds of language. One often differentiates articulatory phonetics (an examination of the way sounds are articulated by the speech organs) from acoustic phonetics (an examination of the acoustic make-up of sounds). See Chapter Two.

Phonology: The study of the elements and principles that determine how sounds pattern in a language. This area is often thought to have a psychological component. See Chapter Three.

Plato's Problem: Chomsky's term for the logical problem of language acquisition: []How can we know so much, given that we're exposed to so little?" See also Logical Problem.

Prefix: An affix that appears in front of its stem. An example is the morpheme *re*- attached to *take* to form *retake*. See Chapter Four.

Prescriptive rules: Rules that attempt to describe linguistic facts in the way that one thinks they <u>should</u> be (not necessarily the way that they are). A good example is the English teacher's injunction against so-called "split infinitives": We're supposed to not "split our infinitives" (but everybody—including the English teacher—does).

Semantics: The study of the various phenomena relating to the meaning of words, phrases, sentences, or whole discourses; the study of meaning in human languages.

Suffix: An affix that appears after its stem. An example is the morpheme -*s* attached to *cat* to form *cats*. See Chapter Four.

Syntax: The study of phenomena relating to the form—usually the word order—of phrases and sentences; the study of phrase or sentence formation. See Chapter Six.

Universal Grammar: The proposed set of genetically transmitted categories and principles that is common to all natural (i.e., human) languages and that allows children to acquire their native language. See Chapter Six.

Verb: The major lexical category whose members designate actions, sensations, or states (e.g., *run*, *feel*, *seem*).

Vocal tract: The speech organs above the larynx, including the oral cavity, the upper throat (pharynx), and the nasal cavity. See Chapter Two.