

Essential

INTRODUCTORY
LINGUISTICS



Grover Hudson





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PREFACE

Knowledge in linguistics has grown greatly since, in the early 1970s, introductory linguistics courses began to be commonly taught to college undergraduates, and introductory linguistics textbooks have tried to present more and more of this knowledge, much of it in increasingly abbreviated form.

In this time, also, the place of linguistics in the college curriculum, and students of linguistics, have changed. Linguistics has become perceived as less arcane and esoteric, and student life is more competitive. More students enroll in introductory linguistics classes because they need these, whether as the foundation of their major field of study, as a requirement of a major in another field, or because linguistics is perceived as relevant for a career – in language teaching or other areas of education, in audiology and speech science, communication fields, computer science, and cognitive psychology, for example. As a result, students are more demanding; they want teachers and textbooks to be very clear about both the content and the goals of lessons. Reasonably, they want to know what the point is, and they want to get to the point.

The structure and method of this book, therefore, is somewhat different from that of other introductory linguistics textbooks. First, it is more selective in its inclusion of topics and subtopics, limiting these, with reasonable consideration to the tradition and expectations of the field, strictly to what the author considers to be essentials. Second, with this selectivity, it has been possible to present each topic with sufficient clarity and thoroughness, and, importantly, to organize, relate, and integrate topics with one another.

Please notice that:

- Chapters are numerous compared to other such books, 28, but relatively short, as seems appropriate for units of study.
- Each chapter is strictly organized, and this organization is made very clear: each chapter begins with a statement of its major content and goals, and

the structure of each chapter is overt with use of numbered and labeled sections, each of which rarely exceeds a few paragraphs in length.

- Wherever possible, information is presented as a list of points and subpoints.
- Points are amply exemplified and illustrated, often in numbered lists.
- When first raised, new concepts and terms are in bold type, and defined. A number of topics reappear from chapter to chapter, and are cross-referenced.
- New concepts and terms are also listed at the end of each chapter.
- The outline of each chapter is presented at the end of each, as a basis for review. Topics of the outlines can be readily rephrased as study questions.
- Finally, at the end of each chapter there are recommended readings, and a number of fairly short, often objective, exercises. Sometimes secondary points which expand on those of the main text are raised in conjunction with these exercises.

It is hoped, therefore, that the book will serve as a study guide as well as the textbook for a course.

Chapters on 'core linguistics' areas of phonology, morphology, and syntax are distributed as follows: After chapters 2–7, two each on phonetics–phonology, morphology, and syntax, there are chapters on language acquisition, brain and language, and animal communication. Then follow six more chapters on core linguistics, two each on phonology, morphology, and syntax–semantics. The 12 chapters on core linguistics have been broken up in this way in order to illustrate applications and to motivate the study of descriptive and theoretical linguistics topics, as well as to more evenly distribute these more technically oriented chapters.

Of course, teachers rarely agree completely on the proper content of the introductory linguistics course, and many will disagree with the present selection. But with the strict and overt structure of this textbook, and with its short chapters, it should be relatively easy for teachers to omit chapters and/or their subunits, and to introduce and integrate additional topics in a coherent way. No doubt many teachers will choose to omit one or both of the chapters on writing (21, 22), that on the history of linguistics (28), perhaps that on animal communication (12), on language families (25), or on universals of language (20).

In a few ways, the content of introductory linguistics as well as its selection and presentation is differently conceived in this book.

- Chapter 1 provides a thorough introduction to the background concepts of the sign and sign systems, using the original terminology of C. S. Peirce: icon, index, and symbol. Other textbooks have avoided these terms, because of their different meanings in ordinary language. Here, this difference between technical, linguistic, and ordinary language usage has been made an emphasis, and the nature of the sign is atopic which is returned to in

several chapters, as one which connects areas of linguistics from structure, to learning, to change.

- Chapter 1 also introduces the general nature of language through the six characteristics of arbitrariness, creativity, openness, duality, grammaticality, and cultural transmission, and these topics also come up again and again in subsequent chapters – particularly that of the probable innateness of language in contrast to the more obvious characteristic of cultural transmission.
- Chapter 2, concerning phonetics, presents the palatal glide in its IPA [j] symbolization versus more typical Anglocentric [y], in order to acknowledge international versus American usage, and to emphasize the difference between phonetic and alphabetic writing.
- Chapter 14 provides a thorough introduction to phonological (distinctive) features, despite the difficulty of this topic and its perceived technical nature by students, in the belief that this important aspect of the unique structure of language is essential and must be made clear.
- Chapters 15 and 16 introduce topics in morphology by a thorough survey of processes of new word formation in English.
- Chapters 21 and 22 provide a more complete treatment of writing systems than is usual. It is well known that students usually find this topic of interest, if most linguists do not. It seems important both to satisfy the student interest, and to take advantage of it to emphasize the difference between language and writing, and to emphasize for native English readers the efficacy of non-alphabetic and non-European writing systems.

Finally, I hope that teachers will forgive, as a necessity, some simplification in the treatment here of a few important but potentially over-complex topics, including:

- the set of universal phonological features, for example, concerning their binarity or not, phonological markedness, and the feature (here [peripheral]), which distinguishes English ‘tense/lax’ vowel pairs;
- the nature of lexical entries, presented here as traditional pairings of form and meaning;
- the nature and representation of morphophonemic alternations, with suppression of the possibility of rule ordering;
- the proper relation between syntactic representation and sentence meaning; and
- the treatment of several syntactic rules as raisings to ‘specifier’ nodes, and the suppression of X-bar theory.

Chapter



SIGNS AND SIGN SYSTEMS

This chapter introduces basic concepts of language, especially the *sign*, and presents the basic structure and general nature of language.

1. THREE BASIC CONCEPTS: SIGN, COMMUNICATION, AND LANGUAGE

1.1. Sign

In ordinary language a sign is a notice placed for the public to see. Here, however, following technical and linguistic usage, let **sign** mean ‘an intersection or relationship of **form** and **meaning**’, where form is something concrete, including writing, sound, and gestures, and meaning is something mental or cognitive.

Examples of signs in this sense include:

‘∞’, which means ‘infinity’,

‘©’, which means ‘copyrighted’,

‘♥’, which means ‘love’, as in ‘I ♥ New York’,

‘*sign*’, which means ‘an intersection or relationship of form and meaning’.

As in the last example, a sign may be a word. A sign does not have to be seen; it could be heard, as is the usual case with words, which are more often spoken than read.

A sign is neither form nor meaning, but simultaneously both: the intersection or relationship of form and meaning. A form without a meaning is not a sign, nor is a meaning without a form. It may be argued that form and meaning cannot exist apart from one another, and it is not easy to argue otherwise. But this rather difficult and profound matter cannot be considered here.

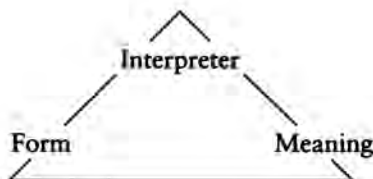


Figure 1.1 The three parts of a sign

1.2. Communication

The notion 'sign' is fundamental to understanding human communication, and upon the basis of the above understanding, we can define **communication** as 'the use of signs'. In communication, one presents the form of signs to others, and so invokes their meanings.

But communication is seldom perfect, and this can be understood as resulting from the third dimension of a sign, the interpreter; see figure 1.1. The relationship between the form of a sign and its meaning must be part of the knowledge of its interpreter. The interpreter adds an aspect or dimension of variability to our understanding of *sign*, because different interpreters may recognize different aspects of meaning in association with particular forms, and different forms in association with particular meanings. This variability is probably apparent with some of the four signs '∞', '©', '♥', and '*sign*'. Some interpreters of these may not recognize the meaning 'infinity' of the ∞ form, and some may be unfamiliar with the still somewhat novel extension of '♥' to mean 'love'. As for the fourth sign, '*sign*', the meaning of this as a technical term has only just been introduced to most readers, whose interpretations undoubtedly vary considerably at this time.

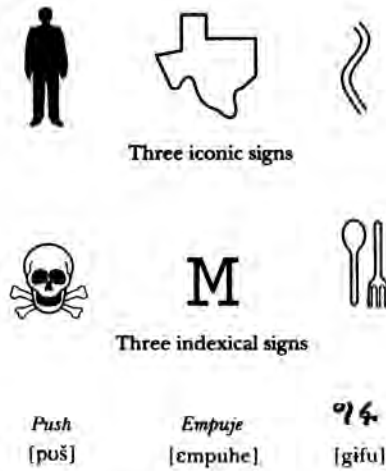
1.3. Language

Language, then, can be simply defined as a sign system. Usually, however, *language* means specifically the customary sign system of humankind, and here we shall follow this usage. Sometimes language, in this sense, is termed **speech**, a term which properly refers just to the vocal medium typically employed to form the natural signs of human languages.

2. SIGNS

2.1. Three types of signs

There are three types of signs (as recognized by the philosopher Charles Sanders Peirce (1839–1914)), which differ according to the three types of relationship that exist between form and meaning: icon, index, and symbol.



Three symbolic signs:

'Push!' in English, Spanish and Amharic

Figure 1.2 The three types of signs

2.1.1. Icon

An icon is a sign whose form has actual characteristics of its meaning. See three examples of iconic signs in figure 1.2. The first means 'man', the second 'Texas', and the third 'winding road'. These three signs can have the meanings 'man', 'Texas', and 'winding road', respectively, since, obviously enough, the forms have actual characteristics of these meanings. The third may not be so obvious, in fact, but when seen posted at the side of a highway, in a mountainous area, its iconic characteristic may be apparent enough.

2.1.2. Index

An index is a sign whose form has characteristics which are only associated in nature with its meaning. Recognizing indexical signs can be a little tricky. See three examples of indexical signs in figure 1.2. The first example is a skull and crossed bones, traditionally a sign meaning 'poison'. Notice the indexical, natural, relation between this form and its meaning: 'if you drink the contents of this bottle, in a few months you will look like this'. Similarly, an oil well could mean 'Texas', since oil wells are something naturally associated with Texas. The third sign, when seen posted at the side of a highway, will suggest 'restaurant' or 'food (service)', by the natural association of spoons and forks with these meanings.

The difference between icon and index is not always perfectly clear. A spoon and fork may be considered an actual characteristic (icon) of restaurants, if only an association (index) with food. The interpreter/interpretation is crucial to the determination of a sign as icon, index, or symbol. The difference between icon

and index is especially problematic when meanings are abstract. Take the meaning 'liberty', for example, and its occasional form of 'breaking chains'. Such a picture/form may be associated with 'liberty' because such an event is an actual characteristic of this otherwise somewhat abstract idea, or, if 'liberty' is essentially something quite abstract (personal, and emotional), because the breaking of chains is just an occasional association with 'liberty' as a precondition in history.

2.1.3. *Symbol*

A **symbol** is a sign whose form is arbitrarily or conventionally associated with its meaning. See three examples of symbolic signs in figure 1.2. These are necessarily presented here in their secondary, written, forms, as ordinarily spelled, and in phonetic writing. The first example, the written English word *push* [puʃ], only means 'push' by a completely arbitrary or conventional association of this form, whether spoken or written, with this meaning. Nothing in nature associates this word with this meaning. In fact, to those who have grown up in the English-speaking world it may seem completely normal that this form should have this meaning. On reflection, however, it must be clear that there is nothing intrinsic to the natural world about this normality, which results entirely from the customary usage or convention of English-speaking communities. The other examples, the Spanish and Amharic (a language of Ethiopia) written words for 'push' – like the English words, those which would be written on a door; as an instruction – are also such symbolic signs.

2.2. Linguistic signs

2.2.1. *Morphemes*

The simplest sort of sign in (human) languages is a **simple word**. An example of a simple word is *sea*, which contrasts with a **complex word** like *seashell*. *Sea* has one meaning and *seashell* has two. But linguistic signs don't have to be words: the *un-* and the *-ly* of *unhappily*, for example, are meaningful too, and these are not words. A linguistic sign, whether of the word type, like *sea* and *shell*, or the sub-word type, like *un-* and *-ly*, is a **morpheme** (*morph* is from Greek, 'form'). There are two morphemes in the word *seashell* (*sea*, *shell*) and three in *unhappily* (*un-*, *happy*, *-ly*).

Although here on the pages of this book it is necessary to present words and morphemes in their written or **orthographic form**, these are ordinarily more common in their spoken or **phonetic form**, a pattern of sound produced by a set of articulations of the physiological apparatus of speech including the lungs, larynx, tongue, velum, lips, etc.

2.2.2. *Symbolic nature of morphemes*

With rare exception, the typical signs of human language, morphemes, are symbolic signs, like *push*, *sea*, *un-*, or other examples of English or of any other

language you know. That is, there is no characteristic of their meaning in their form (whether spoken or written, nor any natural association between their form and meaning).

There are two good reasons why linguistic signs should typically be symbolic. First, we have to process these signs at a rapid average rate of two to three per second, so there is just no time to make use of their iconic and/or indexical aspects. Second, most linguistic meanings don't have iconic or indexical formal properties which could be expressed as vocalizable sounds.

2.2.3. Evidence for the symbolic nature of linguistic signs

There are four sorts of clear evidence that morphemes (and words) are typically symbolic: translation equivalents, synonyms, and iconically expressible meanings, and the rarity of plainly iconic and indexical morphemes.

2.2.3.1. Translation equivalents. Translation equivalents are words with approximately the same meanings in different languages. If words were typically iconic or indexical, then translation equivalents from language to language would be similar in form as well as meaning. The word meaning 'dog', for example, should sound (or look) the same in different languages. But in English, a dog is called a *dog*, in French *chien*, in Spanish *perro*, and in Arabic *kalb*. This is typical for translation equivalents: the words don't sound (or look) similar at all.

2.2.3.2. Synonyms. Synonyms are words with same or similar meanings within a language, for example *sick* and *ill*, and *twelve* and *dozen*. If morphemes were typically iconic or indexical, words with the similar meaning within a language should have similar form. But again there is little or no similarity of form; *sick* doesn't sound like (and isn't spelled like) *ill*, etc.

2.2.3.3. Iconically expressible meanings. Consider meanings that, theoretically, could be readily expressed as pronunciations. An example would be numbers, such as 'one', 'two', etc. If morphemes were iconic or indexical, the form of 'two' would be twice as big as the form of 'one', and the form of 'four' would be twice as big as the form of 'two'. But this isn't so. True, *twenty* is bigger than *ten*, but not twice as big, and *thirty* is not bigger than *twenty* at all. Another example is physical quality opposites like *narrow/wide* and *big/small*. If morphemes were iconic or indexical, the word for 'narrow' should be narrower than the word for 'wide', and the word for 'big' bigger than the word for 'small'. Instead, *narrow* is wider than *wide*; *wide* is narrower than *narrow*, etc.

2.2.3.4. Exceptionality of iconic and indexical morphemes. There are some words which are iconic signs, termed **mimetic words** (also called onomatopoeic words). Mimetic words sound like what they mean, for example, *bow-wow*, *tick-tock*, and *bam*. The phonetic forms of such words have actual characteristics of their meanings, which are sounds; mimetic words sound something like the

sounds they mean. *Bow-wow*, at least, sounds more like the sound of a dog than does *meow* and *meow* sounds more like the sound of a cat than does *bow-wow*. Indeed, in many languages around the world, the word for the sound of a dog is mimetic, and thus somewhat similar to *bow-wow*:

French:	wah-wah
Arabic:	ʔaw-ʔaw
Japanese:	wan-wan
Chinese:	wāw-wāw

Another case of iconicity in morphemes is drawing out the pronunciation of the word *long* so that the form of the word, like the meaning, is long: *loooong* ('I mean, like, reeeally looong, man'). To call a dog a *bow-wow* or a cow a *moo* is also to use iconic signs, since the sound of these words is at least an attempt to give form to an actual quality of the meaning.

But mimetic words are exceptional words! It should be clear that most word-meanings are not – and cannot be – modeled in the forms of the words.

There is rarely some indexicality in words, too. For example, if you want to get someone's attention you might say 'Hey!' If you really want to get their attention you might say it a bit louder, 'HEY!' And if you really, desperately, want to get their attention you might say it even louder, 'HEY!'. This is indexicality; the volume or intensity of the voice naturally rises in association with the intensity of meaning. Notice that this is not iconicity, since the meaning associated with increased loudness is increased interest in getting someone's attention, and loudness is not an actual characteristic of that interest – it's just naturally associated with it. Saying *Oh!* with rising or falling pitch, when excited or disappointed, respectively, gives the word indexical form, in which the pitch is associated with the rise or fall of emotion which may be noted by a hearer as part of the meaning of the word. As with iconic signs, obviously such indexical signs are exceptional cases.

3. LANGUAGE

3.1. Two-part structure of sign systems

Language was defined above as a sign system. Every sign system has two parts:

- a **lexicon**, or dictionary, the inventory of its signs, and
- a **grammar**, the **rules** for the construction of its signs and for their combination into messages.

Consider an example of a very simple sign system, the traffic light. Its lexicon has three signs and, in one version, its grammar has three rules, as follows:

Lexicon:	Meanings	Forms
	'stop'	red light
	'go'	green light
	'caution'	yellow light

- Rules:
1. From top to bottom, the signs are ordered red-yellow-green.
 2. One color is lighted at a time.
 3. The sequence of lights is green-yellow-red, repeatedly.

Adding possibilities to the lexicon such as a flashing mode, or an arrow-shaped light, and possibilities to the rules such as simultaneous signs (green and yellow at the same time), increases the expressiveness and the complexity of the system. Finally, remember that a sign, or sign system, has a third component, the interpreter. Signs and sign systems are useless unless users have shared knowledge of them.

3.2. Three substructures of language

Within and cutting across this two-part structure of inventory and rules, language has three sorts of substructure: phonology, morphology, and syntax.

3.2.1. Phonology

Phonology concerns the sounds of the forms of language. The few languages that lack phonology are the manually signed languages of the deaf, which instead have, parallel to phonological rules, rules which concern the sub-parts of the discrete gestures of the hands (discussed in chapter 12, §4.1).

Phonological form consists of **phones**, for example the phones [m], [æ] and [p] of *map*, and phones consist of even smaller units, **phonological features**, for example:

- [labial], the feature present at the start of the words *map*, *bad* and *wag*;
- [voiced], the feature present at the start of the words *bad* and *dad* and absent at the start of *pad* and *tad*;
- [nasal], the feature of the first phone of *map* and the first and last phones of *name*.

These three features are simultaneously present in the phone [m], the first sound of *map*, the voiced labial nasal [m]. (Phonetic writing is typically shown within square brackets, [].) Languages differ in the phonological features they employ, and in the possibilities for simultaneous or sequential cooccurrence of features.

The possibilities of combination or cooccurrence of phonological features in morphemes are expressed by **phonological rules**. In English, for example, the

"Grover Hudson's new textbook is an exciting discovery, unlike any other introductory in linguistics I have seen. The book is remarkably efficient in organization, with short chapters, each containing lists, outlines, definitions cogent examples, ample and relevant suggestions for extra reading, and useful (and level-appropriate) exercises."

Jeffrey P. Kaplan, San Diego State University

"This is a well-written, student-friendly text. Hudson clearly explains complicated terms and concepts - a boon to an introductory class-yet his comprehensive in-depth coverage of a myriad of linguistic topics makes this an ideal text for higher level linguistic classes as well. Particularly impressive are the number, originality and quality of the exercises provided at the end of each chapter."

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Grover Hudson

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