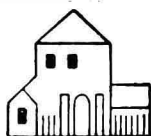


# THE SCIENCE OF LANGUAGE

AN INTRODUCTION TO LINGUISTICS

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*St. Peter's College*  
and  
*Columbia University*



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# THE SCIENCE OF LANGUAGE

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## PREFACE

A scholar who was a wit of sorts once said that the only justification for a scholarly book is the possibility of a second edition. He must have spoken from experience. If my experience is at all typical, anyone who has produced a “learned” work must, as he commits it to print, be painfully aware of its potential shortcomings: detailed explanations that may prove unnecessary, brevity where the reader may want more detail, and above all, a style that may be muddy where it had looked crystal-clear or dull where it had been considered interesting, or—worst of all—that turns out to be *too* readable, for then the book may be termed “slick” and never taken seriously.

I confess my own consciousness of all this, as well as of the fact that not much is said in these pages that has not been said before. However, this was done knowingly, and I trust that my readers, understanding my purpose, will judge the book by the criteria I used in writing it: *completeness* and *teachability*.

The aim of this work is to put into the reader's hands a single volume presenting the fundamentals of all the topics comprised by the science of linguistics. It seeks to be reliable, yet interesting; scholarly, yet not pedantic; readily intelligible, yet not a popularization. It is the outgrowth of more than twenty years of teaching, many of them devoted to linguistics. I trust that this experience is reflected in the organization of the material (which has proved effective with both undergraduate and graduate classes) and that instructors as well as students will find the book a helpful teaching aid.

In order to heighten teachability, important information is often repeated in different contexts and subjects are informally outlined at points preceding those in which they are fully treated. This has been done deliberately because I have found it effective in actual practice. Consequently, the text contains numerous cross-references and a very ample index to facilitate finding all mentions and discussions of a particular topic.

## PREFACE

I want to thank Mr. Laurence Urdang and Mrs. Leonore Hauck of Random House for their unfailing patience and helpfulness; Dr. Arthur Abramson and the Haskins Laboratories for their kind co-operation in providing several of the illustrations; the Very Rev. James J. Shanahan, S.J., former President of St. Peter's College, for granting the sabbatical leave without which this book could not have been completed; and my wife, for her constant inspiration.

John P. Hughes

Ardnashee Falls  
Ottsville, Pennsylvania

# CONTENTS

## PART ONE

<i>Chapter</i>		<i>Page</i>
I.	FUNDAMENTAL NOTIONS ABOUT LANGUAGE	3
	1. The definition of language, 4	
	2. The nature of "meaning," 8	
	3. Language and thought, 9	
	4. The nature of words, 14	
II.	FURTHER BASIC LINGUISTIC CONCEPTS	19
	1. Native language and first language, 19	
	2. "Living" and "dead" languages, 21	
	3. Linguistic change, 22	
	4. Dialects and accents, 23	
	5. The origin of language, 30	
III.	A BRIEF HISTORY OF THE STUDY OF LANGUAGE, I: <i>The Pre-Scientific Period</i>	34
	1. Ancient peoples; Hebrews, Hindus, Greeks and Romans, 34	
	2. The Middle Ages, the Renaissance, and the Eighteenth Century, 45	
IV.	A BRIEF HISTORY OF THE STUDY OF LANGUAGE, II: <i>The Periods of Scientific Linguistics</i>	51
	1. "Comparative Philology" (1786-1870), 51	
	2. The "Neogrammarians" (1870-1925), 59	
	3. The Structuralists (1925-1950), 63	
V.	THE WORLD'S LANGUAGES: EUROPE AND ASIA	73
	1. Geographical & genetic <b>classification</b> , 74	
	2. Typological basis of language <b>classification</b> , 76	
	3. Indo-European and its descendants, 81	

## CONTENTS

4.	Non-Indo-European languages of Europe and India, 87	
	Basque and non-IE languages of India, 89	
	Finnno-Ugric and Altaic, 92	
5.	The Sino-Tibetan languages, 93	
6.	Japanese, 95	
7.	Other languages of Asia, 96	
VI.	THE WORLD'S LANGUAGES: AFRICA, THE PACIFIC, THE AMERICAS	101
	1. The Semitic languages, 101	
	2. The "Hamitic" languages, 104	
	3. Central and southern African languages, 105	
	4. The Malayo-Polynesian languages, 107	
	5. Other languages of Asia and the Pacific, 108	
	6. The American Indian languages, 109	
VII.	LANGUAGES AND WRITING	116
	1. Ideographic "writing," 116	
	2. Pictographic writing, 121	
	3. Syllabic writing, unlimited and limited, 123	
	4. Alphabetic writing, 125	
	5. The wanderings of the alphabet, 130	
	6. The "perfect" alphabet; the phonetic alphabet, 140	
<h2>PART TWO</h2>		
VIII.	PREFACE TO THE SCIENTIFIC DESCRIPTION OF LANGUAGE	145
	1. The concept of "utterance," 146	
	2. The parts of language, 147	
	3. Formant and morpheme, 149	
	4. Tools of analysis: commutation, 151	
	5. Message morphemes and structural morphemes, 152	
	6. Immediate constituents, 154	



IX.	THE STRUCTURE OF TRANSFERRED UTTERANCES	156
	1. "Immediate" and "transferred" utterances, 156	
	2. Establishing basic structural patterns, 157	
	3. Structural word classes: "parts of speech," 161	
	4. Exocentric and endocentric structures, 163	
X.	THE STRUCTURE OF IMMEDIATE UTTERANCES	169
	1. Incomplete utterances, 169	
	2. The fractional nature of incomplete utterances, 170	
	3. Monomorphemic structures: imperative and vocative, 174	
	4. Quasi-imperatives and interjections, 176	
	5. The structure of questions and negatives, 177	
XI.	COMPLEX SYNTACTIC STRUCTURES	183
	1. The sentence structure as a unit of higher forms, 183	
	2. Connective and substitution signals, 184	
	3. Infixation of one S in another, 186	
	4. The "reduced sentence" structure, 187	
	5. The structure of interruptions and exclamations, 189	
XII.	THE STRUCTURE OF WORDS (MORPHOLOGY)	194
	1. Why we have words, 195	
	2. The identity of the word, 196	
	3. Patterns of word structure: Compounds, 197	
	4. Derived words, 200	
	5. Root, stem and ending, 201	
	6. Inflections, "agreement," and correlative words, 203	
	7. The history of the word (etymology), 205	
XIII.	THE PHYSICAL ELEMENT IN LANGUAGE (PHONETICS)	210
	1. Outline of the history of phonetics, 210	
	2. The two branches of phonetics, 211	

## CONTENTS

	3. A sketch of articulatory phonetics, 212	
	4. Outline of acoustic phonetics, 221	
	5. The nature of syllables, 229	
	6. "Prosodic" features, 233	
XIV.	THE ATOMS OF LANGUAGE (PHONEMICS)	239
	1. The phoneme, 239	
	2. Identifying the phoneme, 242	
	3. Phonemic systems, 246	
	4. The dynamics of phonemic systems, 249	
	5. Juncture, 252	
XV.	FRONTIERS AND APPLICATIONS OF LINGUISTICS	258
	1. Frontiers of linguistics, 259	
	2. Linguistics and the teaching of languages, 262	
	3. The language laboratory, 267	
	4. Other applications of linguistics, 270	
	APPENDIX A. A MODEL STATEMENT OF PHONOLOGY	277
	APPENDIX B. A MODEL STATEMENT OF "GRAMMAR"	283
	BIBLIOGRAPHY	285
	INDEX	297

## FIGURES AND ILLUSTRATIONS

1. Thought and word, 10
2. Word and meaning, 10
3. Content range among languages, 12
4. Thought, expression, and translation, 13
5. The scope of linguistics, 15
6. Medieval Italian dialect groups, 24
7. Isoglosses and dialect areas, 27
8. Development of the formula for describing a language, 42
9. Grimm's Law, 54
10. Indo-European reconstructions, 56
11. Typological classification, 78
12. Indo-European migrations, 84
13. Indo-European and its descendants, 85
14. Superimposition of Indo-European languages, 86
15. Inflecting and analytic structure, 88
16. Prehistoric cave drawing, 117
17. An Indian pictographic message, 118
18. Conventionalized symbols, 120
19. Semitic alphabets, 126
20. Egyptian alphabetic characters, 128
21. The Sanskrit alphabet, 131
22. Greek alphabets, 133
23. The Gothic alphabet, 135
24. The runic alphabet, 135
25. Slavic alphabets, 136
26. Latin uncial writing, 138
27. Old English handwriting, 139
28. The organs of speech, 213
29. Basic consonants, 216
30. The International Phonetic Alphabet, 219
31. Basic vowels, 220
32. The vowel triangle, 220
33. Sound as a wave motion, 222
34. Pitch and loudness, 222

## AND ILLUSTRATIONS

- 35. Sound on film, 224
- 36a. Sound spectrograms: natural, 226
- 36b. Sound spectrograms: artificial, 227
- 37. The vowel triangle plotted acoustically, 228
- 38. Consonantal vowels and syllabic consonants, 231

# THE SCIENCE OF LANGUAGE



# PART ONE

## *Chapter I*

### FUNDAMENTAL NOTIONS ABOUT LANGUAGE

Only the most absolutely vital things can be completely ignored. We are conscious when we walk or sit down; yet we could live for decades without doing either. A splinter in the finger may dominate a whole day. But breathing—if any of us went for as much as three minutes without breathing, he would be dead. Do we therefore spend a great deal of time noting and checking the condition of our breathing? We do not. As a matter of fact, we never so much as give breathing a thought. For it is the sort of thing we must either not think of at all, or think of all the time.

Language falls into this category. If not necessary to life, it is certainly necessary to *human* life. Civilization is certainly not possible without it. All sciences depend upon it; all education is conducted through it. It may be necessary for human thought—indeed, some hold that language *is* thought. The material result of all this is, of course, that (until recently, at least) nobody has thought about language. Also, everybody has thought himself an authority on all linguistic matters, which exemplifies another axiom: when there is not—or is not known to be—a formal science of a subject, everyone regards himself as entitled to an opinion, however ill-founded or irrational it might be. Where there are no scientists, there are no laymen.

But it is at last beginning to be generally realized that there *are* professional scholars who devote themselves to the study of what language is and of how it works, and that there *is* a science (albeit one of the younger sciences) concerned with these subjects: a science which has replaced many traditional old wives' tales with a body of experimentally established facts about this most vital of human activities,

and which has finally answered questions about it that for a thousand centuries had been asked without receiving serious, well-founded, or proven answers.

This science is beginning more and more frequently in more and more places to be mentioned—sometimes with respect, sometimes with hatred—under the name of “Linguistics.”<sup>1</sup> For the workers in this new field no really satisfactory name has yet become current; *linguisticist*, which might seem logical, is not used, while *linguist*, which is widely used, also means merely a person who speaks several languages, whether he studies language scientifically or not.

This book is intended both as a first book for a person who wishes to begin the training necessary to becoming a professional linguist, and as an outline of the subject for the interested amateur who wishes to be better informed about it, but has no intention of entering the field. Fortunately, because of the nature of the science, it is possible to do justice to both classes of readers without slighting either. The subject matter of most sciences, if presented for a serious student, rapidly becomes distant from first-hand experience except for one who can spend many hours in the laboratory and has a thorough grasp of advanced mathematics, but the subject matter of linguistics is really just under everyone’s nose (literally and figuratively), once one has been prompted to look.

Thus, to whichever category our reader belongs—be he learned dilettante or future professional linguist—his starting point will be the same. How, indeed, could one begin a science of language except with the question: What is language?

## 1. The definition of language

The definition of our subject is typical of many parts of it, for it seems like a simple, everyday thing, but upon closer inspection proves quite subtle. We all use the term “language,” and feel that we have a clear idea of the sense in which we use it. But the difficulty of arriving at a clear and precise definition becomes apparent when you either collect and compare the definitions given in several dictionaries, or try to write one yourself.

Here are some dictionary definitions of language:



... any means of expressing thought. (Charles L. Meader in the *Encyclopedia Americana*)

... any means of communication between living beings. ... In its developed form language is decidedly a human characteristic. (Otto Jespersen in *Encyclopædia Britannica*)

Audible, articulate human speech as produced by the action of the tongue and adjacent vocal organs. ... The body of words and methods of combining words used and understood by a considerable community, especially when fixed and elaborated by long usage; a tongue. (*Webster's New International Dictionary*, 2nd ed.)

The reader will perhaps agree that none of these gives a really clear concept. But if we turn to the definitions of language offered by linguists, we still do not find the perfect definition, though perhaps we come a little closer. Here are two definitions of language by linguists:

... a purely human and non-instinctive method of communicating ideas, emotions and desires by means of a system of voluntarily produced symbols. (These symbols are ... auditory and ... produced by the ... "organs of speech.") (Sapir, *Language*, 1921, Chapter I)

... the primary and most highly elaborated form of human symbolic activity. Its symbols are made up of sounds produced by the vocal apparatus, and they are arranged in classes and patterns which make up a complex and symmetrical structure. The entities of language are symbols, that is, they have meaning, but the connection between symbol and thing is arbitrary and socially controlled. The symbols of language are simultaneously substitute stimuli and substitute responses and can call forth further stimuli and responses, so that discourse becomes independent of an immediate physical stimulus. The entities and structure of language are always so elaborated as to give the speaker the possibility of making a linguistic response to any experience. (Archibald A. Hill, *Introduction to Linguistic Structures*, 1958, p. 9)