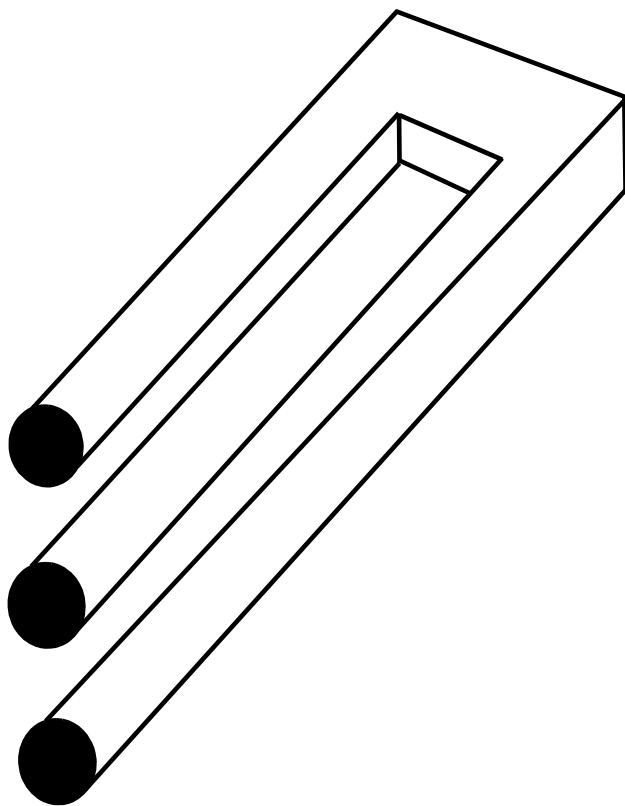


**A GLOSSARY OF TERMINOLOGY USED IN THE STUDY OF
LANGUAGE AND LINGUISTICS**

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Department of Linguistics
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PREFACE

“It is hard to imagine spending one waking moment without language. Whether we are alone or among other people, whether we dream or daydream, whether we write poetry, follow a recipe, cheer for the home team, speak or sing, language is involved. All normal children acquire a native language, no matter where they are born, what the language is or what their home life is like. People who are deaf have language; so do those who are blind, mute, completely paralyzed, mentally retarded, or emotionally disturbed. Language can be disrupted by injury or disease, processed by machines, altered for special occasions, and exploited for ulterior motives. Despite this extraordinary presence, versatility and variability, every human language, whether Old English or Modern Japanese, shares universal features. Linguistics is the discipline that studies such matters concerning language.

Because language is so pervasive and so peculiarly human, students of linguistics find careers in many different areas. Some, such as teachers, computer scientists, and speech therapists, use linguistics directly; others, such as, market analysts, editors, and advertising executives, use it indirectly. Still others use their undergraduate major in linguistics as a springboard to careers in law, education, business, artificial intelligence, and international relations, as well as graduate study in linguistics and other fields.” (Linguistics Section, *Undergraduate Catalogue*, Oakland University)

This glossary is designed to aid both introductory and advanced students of language, linguistics, and related disciplines in their effort to cope with the often bewildering amount of technical terms that language specialists use. Because language is so pervasive, many of the terms and concepts of other disciplines regularly appear in works on language. These include biological and neurological terms necessary to discuss the origin and physical basis of language; psychological, anthropological and sociological terms associated with language development, use and variation; philosophical and logical terms needed for the formal representation of language; and literary, rhetorical and philological terms concerned with matters of composition, style, and usage. This glossary is therefore aimed at providing students with some of the fundamental terminology of other disciplines involved in the study of language and communication.

The glossary begins with a description of symbols and abbreviations and a grammar review, which is designed to acquaint the reader with the core areas of linguistics (phonetics, phonology, morphology, syntax, and semantics) and with the most common terms used in the study of language, such as *noun*, *direct object*, and *clause*. It may be helpful to consult these sections before turning directly to the main body of the glossary.

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TABLE OF CONTENTS

SYMBOLS	1
ABBREVIATIONS	3
GRAMMAR REVIEW	7
SYNTACTIC CATEGORIES (THE PARTS OF SPEECH)	7
SYNTACTIC CONSTRUCTIONS	9
MORPHOLOGY	10
SOME INFLECTIONAL CATEGORIES	11
TRANSCRIPTION	12
TRANSCRIPTION	13
FIGURES	15
FIGURE ONE: THE VOCAL APPARATUS	15
FIGURE TWO I: TYPOLOGICAL CLASSIFICATION	16
FIGURE TWO II: TYPOLOGICAL CLASSIFICATION	17
FIGURE THREE I: HISTORICAL CLASSIFICATION	18
FIGURE THREE II: HISTORICAL CLASSIFICATION	19
FIGURE FOUR I: SOME LANGUAGES OF AFRICA AND THE MID EAST	20
FIGURE FOUR II: SOME AMERICAN INDIAN LANGUAGES	21
FIGURE FOUR III: SOME INDO–EUROPEAN LANGUAGES	22
FIGURE FOUR IV: SOME LANGUAGES OF EAST ASIA AND THE PACIFIC	23
FIGURE FOUR V: SOME OTHER LANGUAGES OF EUROPE AND ASIA	24
FIGURE FIVE: SOME ALPHABETS	25
FIGURE SIX: THE HUMAN BRAIN	26
LANGUAGES AND LANGUAGE FAMILIES, BRANCHES AND GROUPS	27
TERMS	29
REFERENCES	126

SYMBOLS

In the following, “...” stands for any sequence of characters.

- "**—NOTATION — ALPHA NOTATION.
›—ROLE — THETA ROLE.
Ø — PHI/PHI DETERMINER.
- C₀ⁿ** — SUBSCRIPT/SUPERSCRIPT NOTATION.
/...—... — SLASH-DASH NOTATION.
- 3** — ACUTE, e.g., á.
, — CEDILLA, e.g., ç.
^ — CIRCUMFLEX, e.g., â.
4 — GRAVE, e.g., à.
9 — HA,,EK, e.g., ...
2 — MACRON, e.g., ~.
~ — TILDE, e.g., ñ.
@ — UMLAUT, e.g., ä.
- *** — ASTERISK.
(*...) — see ASTERISK.
***(...)** — see ASTERISK.
+ — PLUS SIGN.
- — MINUS SIGN.
— NUMBER SIGN.
÷ — ARROW.
- [e]** — EMPTY CATEGORY.
[u] — EMPTY CATEGORY.
- {...}** — CURLY BRACKETS.
(...) — PARENTHESES.
'...' — SINGLE QUOTES.
/.../ — SLASHES.
[...] — SQUARE BRACKETS.

ABBREVIATIONS

A	— ADJECTIVE.
ABE	— ABESSIVE.
ABL	— ABLATIVE.
ABS	— ABSENTIVE.
ACC	— ACCUSATIVE.
ADE	— ADESSIVE.
ADJ	— ADJECTIVE.
ADV	— ADVERB.
ADVP	— ADV PHRASE.
AFC	— AFFECTIVE.
AFR	— AFFERENTIAL.
AI	— ARTIFICIAL INTELLIGENCE
ALL	— ALLATIVE.
ANT	— ANTERIOR.
AP	— ADJECTIVE PHRASE.
APS	— ALIENABLE POSSESSOR.
ASC	— ASSOCIATIVE.
ASL	— AMERICAN SIGN LANGUAGE.
ASP	— ASPECT.
ATN	— AUGMENTED TRANSITION NETWORK.
ATT	— ATTRIBUTIVE.
AUX	— AUXILIARY.
BE	— BLACK ENGLISH.
BEN	— BENEFACTIVE.
BR	— BINDING RESIDENT.
C	— CHARACTERIZER/CONSONANT.
CAU	— CAUSAL.
CG	— COGNITIVE GRAMMAR.
CGR	— CONGRESSIVE.
CHO	— CHÔMEUR.
CIR	— CIRCUMSTANTIAL.
CND	— CONDITIONAL.
CNJ	— CONJUNCTURAL.
CNS	— CONSECUTIVE.
COM	— COMITATIVE.
COMP	— COMPLEMENTIZER.
CON	— CONSONANTAL.
CONT	— CONTINUANT.
COR	— CORONAL.
CPL	— COMPLEMENTIZER

CPR	— COMPARATIVE.
CPS	— COMPOSITIONAL.
CPT	— COMPONENTIAL.
DAT	— DATIVE.
dB	— DECIBEL.
DEL	— DELIMITIVE.
DET	— DETERMINER.
DGR	— DEGREE WORD.
DIF	— DIFFERENTIAL.
DIM	— DIMENSIONAL.
DSJ	— DISJUNCTURAL.
ECH	— ENVIRONMENT OF CHARACTERIZER HEAD.
EFC	— EFFECTIVE.
EFR	— EFFERENTIAL.
ELA	— ELATIVE.
ENH	— ENVIRONMENT OF NOUN HEAD.
ERG	— ERGATIVE.
EVH	— ENVIRONMENT OF VERB HEAD.
EXP	— EXPEDIENTIAL.
EXT	— EXTENSIONAL.
FEM	— FEMININE.
FST	— FIRST ORDER.
FUT	— FUTURE.
GEN	— GENITIVE/GENDER.
GG	— GENERATIVE GRAMMAR.
GPSG	— GENERALIZED PHRASE STRUCTURE GRAMMAR.
Hz	— HERTZ.
IGR	— INGRESSIVE.
ILL	— ILLATIVE.
IMP	— IMPERATIVE.
INS	— INSTRUMENTAL.
IPS	— INALIENABLE POSSESSOR.
LF	— LOGICAL FORM.
LFG	— LEXICAL-FUNCTIONAL GRAMMAR.
LOC	— LOCATIVE.
LTM	— LONG TERM MEMORY.

MASC	— MASCULINE.
MDE	— MODE/MOOD.
MLU	— MEAN LENGTH OF UTTERANCE.
MOD	— MODAL.
N	— NOUN.
NAPS	— ALIENABLE NONPOSSESSOR.
NASC	— NONASSOCIATIVE.
NATT	— NONATTRIBUTIVE.
NCIR	— NONCIRCUMSTANTIAL.
NCOM	— NONCOMITATIVE.
NCPR	— NONCOMPARATIVE.
NEG	— NEGATIVE.
NEUT	— NEUTER.
NINS	— NONINSTRUMENTAL.
NIPS	— INALIENABLE NONPOSSESSOR.
NML	— NOMINAL.
NOM	— NOMINATIVE.
NP	— NOUN PHRASE.
NTG	— NON-TRANSFORMATIONAL GRAMMAR.
NUM	— NUMBER.
OPN	— OPEN CLASS.
ORG	— ORIGINATIVE.
P	— PREPOSITION.
PCOMP	— PRIMARY COMPLEMENT.
PER	— PERSON.
PF	— PHONETIC FORM.
PFCP	— PERFECTIVE PARTICIPLE.
PIE	— PROTO-INDO-EUROPEAN.
PL	— PLURAL.
POS	— POSSESSIVE.
PP	— PREPOSITIONAL PHRASE.
PRGP	— PROGRESSIVE PARTICIPLE.
PRH	— PREHEAD.
PRO	— PRONOUN.
PRS	— PRESENT.
PRX	— PROXIMAL.
PS-RULE	— PHRASE STRUCTURE RULE.
PSH	— POSTHEAD.
PST	— PAST.
PSVP	— PASSIVE PARTICIPLE.

PUR	— PURPOSIVE.
QNT	— QUANTIFIER.
REF	— REFERENTIAL.
RES	— RESULTATIVE.
RG	— RELATIONAL GRAMMAR/RESIDENTIAL GRAMMAR.
RTN	— RECURSIVE TRANSITION NETWORK.
S	— SENTENCE.
SAE	— STANDARD AMERICAN ENGLISH.
SCOMP	— SECONDARY COMPLEMENT.
SG	— SINGULAR.
STM	— SHORT TERM MEMORY.
TG	— TRANSFORMATIONAL GRAMMAR.
TNS	— TENSE.
TRM	— TERMINATIVE.
T-RULE	— TRANSFORMATIONAL RULE.
TYP	— TYPOLOGICAL.
V	— VERB/VOWEL.
VBL	— VERBAL.
VOC	— VOCATIVE/VOCALIC.
VP	— VERB PHRASE.
X3L	— X3 LEVEL.
X2L	— X2 LEVEL.
X1L	— X1 LEVEL.
X0L	— X0 LEVEL.

GRAMMAR REVIEW

SYNTACTIC CATEGORIES (THE PARTS OF SPEECH)

NOUN: Nouns are identifiable on the basis of several criteria. First, they can occur after definite articles, e.g., *the book*, after indefinite articles, e.g., *a book*. Second, nouns are inflected to show number distinctions, e.g., *one book* versus *two books*, and to indicate possession, e.g., *the book's cover*. Third, nouns fulfill a number of specific functions in sentences. For instance, they can be used as the subject of a verb, e.g., *The book ends sadly*, as the object of a verb, e.g., *John likes that book*, and as the object of a preposition, e.g., *There are no pictures in the book*. Nouns are variously subcategorized as follows:

PROPER NOUNS are those which refer to specific individuals, places, or things, e.g., *John*, *Rome*, and *English*; **COMMON NOUNS** are non-specific in reference, e.g., *man*, *city*, and *language*.

CONCRETE NOUNS are those which refer to tangible objects, e.g., *cow*, *fence*, and *painting*; **ABSTRACT NOUNS** name intangible things, e.g., *admiration*, *gravity*, and *painting*. Notice that some nouns have both concrete and abstract references.

COUNT NOUNS are those which are numerable, e.g., *tree*, *leg*, and *linguist*; **MASS NOUNS** are not numerable, e.g., *butter*, *water*, and *furniture*. Notice that one does not ordinarily say *butters*, *waters*, and *furnitures* (but, *the waters of the Nile*).

COLLECTIVE NOUNS are those which refer to groups of items, e.g., *herd*, *crowd*, and *mob*.

PRONOUN: A pronoun is a word which is used in place of a noun phrase, e.g., *he*, *she*, *who*, *myself*, etc. The various subclasses of pronouns are as follows:

PERSONAL PRONOUNS refer to the speaker, the hearer, or the person or thing spoken about, e.g., *I*, *me*, *you*, and *him*.

REFLEXIVE PRONOUNS are object pronouns which refer back to the subject of the clause in which they occur, e.g., *myself*, *itself*, and *themselves*.

INTENSIVE PRONOUNS emphasize a preceding noun or pronoun, e.g. *myself*, *itself*, and *themselves*. The form of reflexive and intensive pronouns is the same. In *I myself saw myself in the mirror*, the first *myself* is intensive, the second is reflexive.

INDEFINITE PRONOUNS refer to indefinite persons and things, e.g., *someone*, *anybody*, and *everything*.

POSSESSIVE PRONOUNS are those which take the place of possessive nouns, e.g., *her*, *his*, and *its*.

DEMONSTRATIVE PRONOUNS are used to designate particular persons or things, e.g., *this*, *that*, and *these*.

RELATIVE PRONOUNS are those which introduce relative clauses, e.g., *who*, *whom*, and *which*.

INTERROGATIVE PRONOUNS are used in place of nouns in questions, e.g., *who*, *which* and *what*.

RECIPROCAL PRONOUNS express mutual actions or relationships, e.g., *each other* and *one another*.

VERB: A verb is a word which serves to express an action, an occurrence, or a state of being, e.g., *shot* in *The inspector shot the bandit*, *blow up* in *The school blew up*, *be* in *That girl is clever*. Verbs are identifiable by a variety of inflectional distinctions, including tense, person, number, and voice. The subclasses of verbs are as follows:

TRANSITIVE VERBS are those which take objects, e.g., *break* in *John broke the vase*, and *destroy* in *John destroyed the vase*.

INTRANSITIVE VERBS are those which do not take objects, e.g., *break* in *The vase broke*, and *disappear* in *The vase disappeared*.

COPULATIVE VERBS are those which link the subject with a nominal or adjectival complement, e.g., *appear* in *John appears healthy*, and *be* in *John was the king for two years*.

ADJECTIVE: An adjective is a word which qualifies, limits, or otherwise modifies the meaning of a noun, e.g. *pretty*, *little*, and *white*. In English, adjectives occur in two principal positions, either before the nouns they modify, e.g., *the rebellious student*, or after verbs like *be*, e.g., *the student is rebellious*. The two positions are called, respectively, the **ATTRIBUTIVE POSITION** and the **PREDICATE POSITION**. Adjectives are inflected to show one of three degrees of comparison: the **POSITIVE DEGREE**, the **COMPARATIVE DEGREE**, and the **SUPERLATIVE DEGREE**. The comparative degree is used when two items are being compared; the superlative is used when three or more items are being compared. For example: *John is a good boy* (positive degree); *John is a better boy than Bill* (comparative degree); *John is the best boy in the class* (superlative degree).

ADVERB: An adverb is a word which modifies a verb or an adjective, e.g., *quickly* in *John ran quickly*, and *unbelievably* in *John is unbelievably clever*. Like adjectives, adverbs are compared in the positive, comparative, and superlative degree, e.g., *Mary cleans her house thoroughly all the time* (positive), *Mary cleans her house more thoroughly on weekdays than on weekends* (comparative), and *Mary cleans her house (the) most thoroughly before her mother-in-law comes to visit* (superlative).

CONJUNCTION: A conjunction is a word which connects one grammatical category or grammatical construction with another. There are two basic types of conjunctions: **COORDINATING** and **SUBORDINATING**. A coordinating conjunction connects elements in such a way as to indicate approximately equal order or rank amongst the elements, e.g., *John and Harry, on the table or on the desk, and Sit down and eat your spinach*. A subordinating conjunction on the other hand, connects elements in such a way as to place one in a lower order or rank with respect to the other, e.g., *Sit down, while you are eating your spinach*.

PREPOSITION: A preposition is a word which introduces a phrase ending in a noun, or the equivalent of a noun, and which typically serves as an adverbial or adjectival modifier, e.g., *John ran into the yard, and John is in the yard*.

SYNTACTIC CONSTRUCTIONS

SENTENCE: A sentence is a structured expression consisting minimally of two main constituents, a **SUBJECT**, which specifies the topic of the expression, and a **PREDICATE**, which specifies what is asserted of the topic. There are four principal types of sentences: **DECLARATIVE**, those which make statements, e.g., *John wrote Helen a letter*; **INTERROGATIVE**, those which ask questions, e.g., *Did John write Helen a letter*; **IMPERATIVE**, those which give a command or make a request, e.g., *Please, write Helen a letter*; and **EXCLAMATORY**, those which express strong or sudden feeling, e.g., *What a beautiful letter John wrote Helen!*

CLAUSE: Like sentences, clauses are also expressions which contain a subject and a predicate. All clauses must contain a tensed verb. Clauses are of two types: **INDEPENDENT** and **DEPENDENT** (or **SUBORDINATE**). An independent clause is one which can stand alone; hence, a sentence is an independent clause. A dependent clause is one which occurs in conjunction with an independent clause. When a sentence consists of only one independent clause, it is called a **SIMPLE** sentence; when it consists of two or more independent clauses and no dependent clauses, it is called a **COMPOUND** sentence; and when it contains one or more dependent clauses, it is called a **COMPLEX** sentence.

PHRASE: A phrase is any group of words which serves as a unit within a clause. Phrases are usually named for their most distinctive element, called the **HEAD**, e.g., noun phrase, verb phrase, prepositional phrase, and so on.

MORPHOLOGY

Most grammars divide the study of sentence structure into two areas, **MORPHOLOGY**, which deals with the internal structure of words, and **SYNTAX**, which deals with the way words are combined to form sentences. In morphology, the basic units under investigation are the morphemes of a language. By definition, a **MORPHEME** is a minimal unit of meaning, that is, a meaningful sequence of sounds which is not divisible into smaller meaningful units, e.g., *ball*. It is important not to equate morphemes with either words or syllables; in both theory and practice, there is no necessary coincidence between a morpheme and either of these units. For example, the English noun *hands* is one word consisting of one syllable, but having two morphemes: *hand*, which defines a specific body part, and *s* which indicates plural. Conversely, *finger* has two syllables but is only one morpheme. One cannot divide the word *finger* into smaller meaningful units: the sequences *fin*, *inger*, *ger*, etc. are all without content. Even the sequence *fin*, which does have meaning in English, is not part of the morphological structure of *finger*, because its meaning is unrelated to the meaning of the whole word.

Morphemes are variously classified by linguists as **BOUND** or **FREE** and as **ROOTS** or **AFFIXES**. A **BOUND MORPHEME** is one which cannot occur as an independent word, e.g., the *un-* meaning 'not' in *untrustworthy*, *unappreciative*, *unnecessary*, etc. A **FREE MORPHEME** is one which can stand alone, e.g., the morpheme *trust*. In English, bound morphemes constitute a relatively small class of items, while the number of free morphemes is very large. In other languages, the situation is often quite different. For example, Classical Greek has very few free morphemes, but a great number of bound ones. In Vietnamese, almost all of the morphemes are classified as free.

A **ROOT** is a morpheme which constitutes the core element of a word or group of words of closely related meaning. For example, the morpheme *trust* serves as the root in all of the following words: *trusted*, *untrustworthy*, *mistrustful*, *entrust*, and so on. An **AFFIX** is a bound morpheme added to the beginning of a word (in which case it is called a **PREFIX**) or to the end of a word (in which case it is called a **SUFFIX**). Some common affixes in English are *un-*, *mis-*, *con-*, *ex-*, *-ly*, *-ing*, *-ness*, and *-er*. That part of a word to which affixes are added is called a **STEM**. In English, the stem and the root of a word are usually the same string; in other languages, they differ.

Affixes that are added to roots to indicate grammatical relationships are known as **INFLECTIONAL ENDINGS**, and the process of combining these endings with roots is called **INFLECTION**. The *-s* used to indicate the plural of English nouns is an example of an inflectional ending, as is the *-ed* used to indicate past tense. Comparatively speaking, English is very poor in inflectional endings. Other languages have highly developed inflectional systems. For example, in Latin, Russian, and Finnish, the form of a noun changes depending on whether it is used as the subject of a verb or as the object. In English, nouns are not inflected for this particular contrast, although some pronouns are, e.g., *I/me*, *she/her*, *he/him*, *we/us*, *they/them*, *who/whom*. When applied to **SUBSTANTIVES** (nouns, pronouns, and adjectives) inflection is referred to as **DECLENSION**; when applied to verbs, it is called **CONJUGATION**.

SOME INFLECTIONAL CATEGORIES

PERSON: the inflectional category in pronouns and verbs that refers to the three-way distinction between the speaker (first person), e.g., *I am tall*, the hearer (second person), e.g., *You are tall*, and someone or something else (third person), e.g., *He (she, it) is tall*.

NUMBER: an inflectional category in substantives and verbs that refers to the distinction between singular, e.g., *the house IS big*, and plural, e.g., *the houses ARE big*.

TENSE: an inflectional category in verbs which indicates distinctions in the **TIME (PRESENT, PAST, FUTURE)** and the **ASPECT (PROGRESSIVE, PERFECTIVE)** of an action or state. For example, the verb phrase *is looking* is in the present progressive tense, that is, it indicates an action which is going on in the present; the verb phrase *has looked* is in the present perfective tense, that is, it indicates an action that was completed in the past. Strictly speaking, tense is only partially an inflectional category in English, since it is signaled both by independent words, e.g., forms of the verbs *be* and *have* and by endings, e.g., *-ing* and *-ed*.

VOICE: an inflectional category in verbs that refers to the distinction between **ACTIVE** and **PASSIVE**. An active verb is one whose subject is viewed as performing the action it defines, e.g., *John killed the tigers*; a passive verb is one whose subject is viewed as undergoing the action it defines, e.g., *the tigers were killed by John*.

MOOD: an inflectional category in verbs that refers to the distinction between **INDICATIVE**, **CONDITIONAL**, and **IMPERATIVE**. The indicative mood expresses ordinary statements (*he stopped*); the conditional mood expresses conditions (*he would stop*); the imperative mood expresses commands (*stop!*).

CASE: an inflectional category which indicates the relationship of substantives to other words in a sentence. In English, the opposition *he/him/his* is a case opposition: *he* is used to indicate the subject (**NOMINATIVE CASE**), *him* to indicate the object (**OBJECTIVE** or **ACCUSATIVE CASE**), and *his* to indicate the possessor (**POSSESSIVE** or **GENITIVE**).

GENDER: an inflectional category in substantives that refers to the tripartite distinction between **MASCULINE**, **FEMININE**, and **NEUTER**. In English, only the third person singular pronouns show gender distinctions, e.g., *he*, *she*, and *it*; moreover, the distinction is based on sex. In other languages, e.g., German, gender is a grammatical category of substantives and bears no relationship to sex.

TRANSCRIPTION

VOWELS:

[i]/[iy]	<i>beat, beet, Caesar, people, we, machine, receive, believe</i>
[ɪ]	<i>bit, into, been, abyss, fountain, button, language</i>
[u]/[uw]	<i>boot, who, duty, through, too, to, two, new, nuisance, blue</i>
[ʊ]	<i>put, wood, would, butcher, woman</i>
[e]/[ey]	<i>bait, fate, great, eight, rain, reign, rein, they, hay, gauge</i>
[ɛ]	<i>bet, dead, said, guest, many, friend, says, jeopardy</i>
[ɔ]	<i>butted, roses, alone, sofa, the</i>
[o]/[ow]	<i>boat, so, sew, own, though, plateau, toe, soul, brooch</i>
[ɔ]	<i>bought, caught, chalk, saw, awful, author, sore, soar, four</i>
[æ]	<i>bat, laugh, plaid</i>
[ʌ]	<i>but, does, tough, flood, ton, country</i>
[ɑ]	<i>pot, palm, far, sergeant, ox</i>

DIPHTHONGS:

[ɔy]	<i>boy, soil</i>
[ay]	<i>sigh, nice, guy, lie</i>
[aw]	<i>cow, house</i>

GLIDES:

[w]	<i>wish, when, queen</i>
[y]	<i>yes, beyond, use, feud</i>
[h]	<i>high, whole</i>

LIQUIDS:

[l]	<i>live, let</i>
[ɹ]	<i>drill, along, willing</i>
[r]	<i>rich, car, bury, furry</i>
[D]/[]	<i>water, later, latter, ladder, writer, rider, party</i>

TRANSCRIPTION

NASALS:

[m]	<i>mess, hymn, hum, swimming</i>
[n]	<i>neat, kin, winning, pneumonia, knife</i>
[ɲ]	<i>mañana</i>
[ŋ]	<i>sing, think, tongue</i>

STOPS:

[p ^h]	<i>pain, prune, plaque, appear, shrimps, hiccoughing</i>
[p]	<i>spit, spun, spring, expose</i>
[b]	<i>broom, crabs, rubber</i>
[t ^h]	<i>tip, tough, pterodactyl, intend, attack</i>
[t]	<i>stick, stun, string, extend</i>
[d]	<i>dig, bad, killed, heard, mending</i>
[k ^h]	<i>keep, cat, chord, quite, pickle, accommodate, antiquing</i>
[k]	<i>skit, scum, school, screw, excuse</i>
[g]	<i>give, bag, egg, rogue</i>

FRICATIVES:

[f]	<i>first, stuff, telephone, rough</i>
[v]	<i>value, sliver, of</i>
[θ]	<i>thin, breath, teeth, ether, both, thing</i>
[ð]	<i>then, breathe, teethe, either</i>
[s]	<i>sin, this, cross, science, ceiling, race, psychology</i>
[z]	<i>zoo, drizzle, was, xylophone, scissors</i>
[ʃ]/[ʃ̥]	<i>show, chute, flash, issue, conscious, sure, mansion, racial</i>
[ʒ]/[ʒ̥]	<i>measure, azure, prestige, illusion, beige</i>

AFFRICATES:

[tʃ]/[tʃ̥]	<i>chin, kitchen, question, righteous, much</i>
[dʒ]/[dʒ̥]	<i>jig, judgment, ridge, gem, graduation, region</i>

FIGURES

FIGURE ONE: THE VOCAL APPARATUS

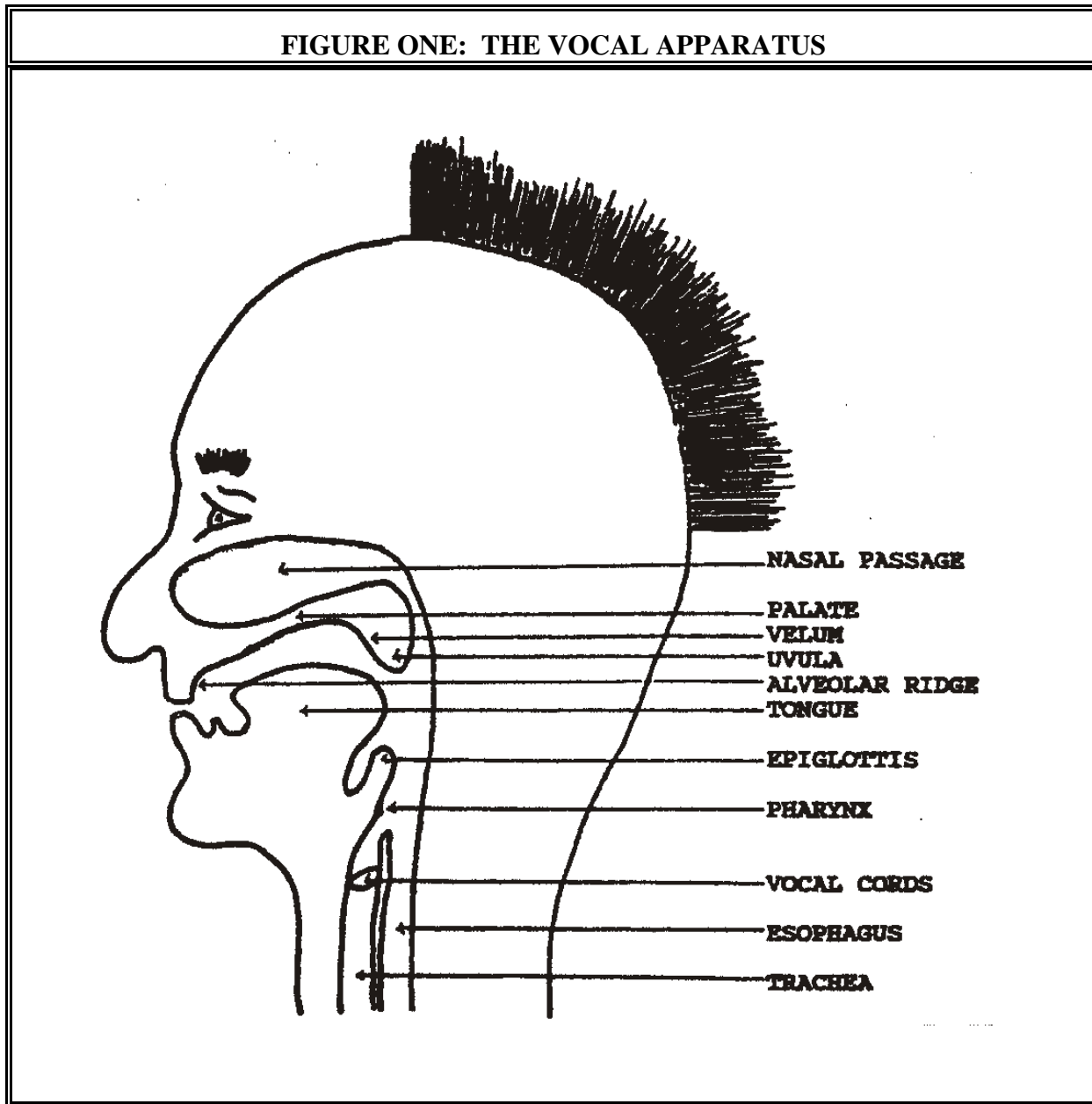


FIGURE TWO I: TYPOLOGICAL CLASSIFICATION

ANALYTIC (ISOLATING) LANGUAGES: words consist of single morphemes; most words consist only of a root. Mandarin Chinese, Vietnamese, Cantonese, Cambodian. Examples in Mandarin adapted from Norman J., *Chinese*, Cambridge, 1988:

1. Ta chſ fān le.
he eat food past
'He ate the food.'
2. Ta chſ le fān.
he eat past food
'He ate the food.'
3. Júzi w4 chſ le.
orange I eat past
'I ate the orange.'

AGGLUTINATING LANGUAGES: words consist of a stem and one or more clearly identifiable affixes. Finnish, Hungarian, Estonian, Swahili, Turkish. Examples in Estonian adapted from Oinas, F., *Basic Course in Estonian*, Indiana University, 1966:

1. Ta on kohvikus.
he is coffee-house-in
'He is in the coffee house.'
2. Lähme kohvikusse.
go-we coffee-house-into
'Let us go into the coffee house.'
3. Ma tulen uuest kohvikust.
I come new-from coffee-house-from
'I am coming out of the new coffee house.'
4. Cases:

nominative	kohvik	the coffee house
genitive	kohviku	of the coffee house
partitive	kohvikut	the coffee house
illative	kohvikusse	into the coffee house
inessive	kohvikus	in the coffee house
elative	kohvikust	out of the coffee house
allative	kohvikule	to the coffee house
adessive	kohvikul	by the coffee house
ablativ	kohvikult	from the coffee house
translative	kohvikuks	for the coffee house
essive	kohvikuna	as the coffee house
terminative	kohvikuni	up to the coffee house
comitative	kohvikuga	with the coffee house
abessive	kohvikuta	without the coffee house

FIGURE TWO II: TYPOLOGICAL CLASSIFICATION

INFLECTIONAL (FUSIONAL) LANGUAGES: words consist of stem and affixes which often mark several grammatical categories simultaneously. Greek, Latin, Sanskrit, Russian. Examples in Latin (NomSg=nominative singular, NomPl=nominative plural, AccSg=accusative singular, AccPl=accusative plural, 3Sg=third person singular, 3Pl=third person plural):

1. Custos fidelis consulem veterem ducit.
 NomSg NomSg AccSg AccSg 3Sg
 guard trusty consul old is leading

‘The trusty guard is leading the old consul.’

2. Custodes fideles consules veteres ducunt.
 NomPl/AccPl NomPl/AccPl NomPl/AccPl NomPl/AccPl 3Pl

‘The trusty guards are leading the old consuls.’

‘The old guards are leading the trusty consuls.’

‘The trusty consuls are leading the old guards.’

‘The old consuls are leading the trusty guards.’

POLYSYNTHETIC LANGUAGES: words consist of long strings of stems and affixes, which may translate as an entire English sentence. American Indian languages. Examples in Ayacucho Quechua adapted from Parker, G., *Ayacucho Quechua Grammar and Dictionary*, Mouton, 1969:

Verbs can be inflected for both actor and object in different persons and number.

1. riku-yki ‘I see you.’
 2. riku-yki-**.ik** ‘I see you all.’
 3. riku-yki-ku ‘We see you.’

riku: ‘see’
 yki: first person singular actor and second person singular object
.ik: marks object as plural
 ku: marks actor as plural

4. riku-wanki ‘You see me.’
 5. riku-wanki-**.ik** ‘You all see me.’
 6. riku-wanki-ku ‘We see you.’

wanki: second person singular actor and first person singular object
.ik: marks actor as plural
 ku: marks object as plural

FIGURE THREE I: HISTORICAL CLASSIFICATION

LEXICON: INDO-EUROPEAN

love (n) mother father brother break (v) three five hundred heart

GERMANIC:

ENGLISH:	love	mother	father	brother	break	three	five	hundred	heart
MID ENGLISH:	love	moder	fader	brother	breke	thre	f S	hund(red)	herte
OLD ENGLISH:	lufu	m Q or	fæder	br Q or	brecan	þr S	f S (e)	hund	heorte
GERMAN:	liebe	mutter	vater	bruder	brechen	drei	fünf	hundert	herz
DUTCH:	liefde	moeder	vader	broeder	breken	drie	vijf	honderd	hart

GREEK:

ANCIENT GREEK:	er Q	m't'r	pat'r	adelphos	hr'gn ā ni	treis	pentē	hekatōn	kardia
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CELTIC:

IRISH:	searc	m-thair	athair	br-thir	brisim	tr S	cóic	c't	croidhe
WELSH:	serch	mam	tad	brawd	torri	tri	pump	cant	calon

ITALIC:

LATIN:	amor	m-ter	pater	frater	frangere rumpere	tr's	quinque	centum	cor
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ROMANCE:

SPANISH:	amor	madre	padre	hermano	romper	tres	cinco	ciento	corazón
PORTUGUESE:	amor	m #	pai	irm #	quebrar	três	cinco	cem	coraç #
ITALIAN:	amore	madre	padre	fratello	rompere	tre	cinque	cento	cuore
FRENCH:	amour	mère	père	frère	rompre	trois	cinq	cent	coeur
RUMANIAN:	amor	mam |	tat |	frate	fînge rupe	trei	cinci	sut |	inim |

BALTO-SLAVIC:

RUSSIAN:	ljubov'	mat'	otec	brat	lomat'	tri	pyat'	sto	serdce
CHURCH SLAVIC:	ljuby	mati	ot Q	brat	lomiti	tr Q e	pet \	s B o	sr B o e

INDO-IRANIAN:

SANSKRIT:	k~ma-	m~tar-	pitar-	bhr~tar-	bhañj-	trayas	pāñca	çatam	h ṛ -
HINDI:	muhabbat	mátá	báp	bháí	torná	t S	pāc	sau	dil
AVESTAN:	kan-	m~tar-	pitar-	br~tar-	s.and-	> r-y Q	pan.a.	sat an	z ca -

FIGURE THREE II: HISTORICAL CLASSIFICATION

LEXICON: NON-INDO-EUROPEAN

	love (n)	mother	father	brother	break (v)	three	five	hundred	heart
<u>ALTAIC:</u>									
JAPANESE:	ai	haha	chichi	kyôdai	kowareru	san	go	hyaku	shinzô
<u>SINO-TIBETAN:</u>									
CHINESE:	ai	m ^h h ^s	fûchin	sy ^ã ngdì	nùngpwò	s~n	w ^h	b |i	sy ^s
<u>URALIC:</u>									
FINNISH:	rakkaus	äiti	isä	veli	rikkoa	kolme	viisi	sata	sydän
<u>AUSTRONESIAN:</u>									
SAMOAN:	alofa	tin~	tam~	uso ¹	talepe ⁴	tolu	lima	selau	fatu
HAWAIIAN:	aloha	makuahine	makua	kua'ana ²	w~hi ⁴	kolu	lima	hanele	pu'uwai
<u>AFRO-ASIATIC:</u>									
<u>CHADIC:</u>									
HAUSA:	so ⁵	ãva	ɕa	w~ ³	kária	úku	biál	darí	zútoia
<u>SEMITIC:</u>									
ARABIC:	ḥubb	šmm	šb(u)	šax	yiksir	talaate	xamse	miyye	šlb
<u>UTO-AZTECAN:</u>									
COMANCHE	kamakuru ⁵	pia	ahpuš	samohpuš	tahparu	pihihtu		makekituš	pihi
NOTES:									
¹	uso = brother of a man; tuagane = brother of a woman								
²	kua'ana = older sibling of the same sex; kaina = younger sibling of the same sex; ku~ne = sibling of a female; etc.								
³	w~ = older male sibling; k~ne = younger male sibling								
⁴	There are many verbs for <i>break</i> depending on the nature of the thing broken, e.g., hard things, brittle things, things that break easily, bones, etc.								
⁵	There is no noun meaning <i>love</i> ; these are verb forms.								

FIGURE FOUR I: SOME LANGUAGES OF AFRICA AND THE MID EAST*					
Family	Branch	Group	Representative Languages	Principal Locations	Number of Speakers
Afro-Asiatic (241)	Chadic		Hausa	N Nigeria; Niger; Cameroon	39,000,000
	Semitic		Hebrew	Israel	5,000,000
			Tigrinya	S Eritrea; N Ethiopia	4,000,000
			Amharic	Ethiopia	20,000,000
			Arabic	Egypt; Iraq; Syria; Morocco	230,000,000
	Hamitic	Berber	Tamazight	W Algeria; N Morocco	3,000,000
			Kabyle	W Kabylia; N Algeria	3,000,000
			Shilha	W Algeria; S Morocco	3,000,000
		Cushitic	Somali	Somalia; Kenya; Ethiopia; Djibouti	4,000,000
			Galla (Oromo)	W Ethiopia; N Kenya	9,000,000
Omotic		Wolaytta	SE Ethiopia	2,000,000	
Khoisan (31)			Nama (Hottentot)	Namibia	146,000
			Sandawe	Tanzania	70,000
Niger-Congo (1032)	Mande		Mende	Sierra Leone	2,000,000
	West Atlantic		Fula	Senegal; Nigeria; Cameroon	13,000,000
			Wolof	Senegal	7,000,000
	Kwa		Akan	Ghana; Côte d'Ivoire	7,000,000
			Yoruba	SW Nigeria; Benin	20,000,000
			Igbo (Ibo)	Nigeria	17,000,000
			Ewe	S Togo; SE Ghana	3,000,000
	Benue-Congo		Efik	SE Nigeria	6,000,000
			Tiv	SE Nigeria; Cameroon	2,000,000
		Bantu	Swahili	Tanzania; Kenya; Zaire; Uganda	49,000,000
			Zulu	S Africa; Lesotho	9,000,000
			Xhosa	S Africa	8,000,000
	Gur (Voltaic)		More	Burkina Faso	4,000,000
Adamawa-Ubangian		Sango	Central African Republic	4,000,000	
Nilo-Saharan (138)	Nilo-Hamitic		Maasai	Kenya; Tanzania	689,000
	Nilotic		Luo	Kenya; Nyanza; Tanzania	4,000,000

* There is much scholarly debate on the classification of languages. The various subdivisions in Figure Four I, II, III, IV, and V reflect only major distinctions generally recognized. The approximate number of languages in each family is in parentheses (data from Ruhlen 1987). Statistics for individual languages with more than 1 million speakers are from *The World Almanac and Book of Facts*, 1997, Mahwah, NJ: World Almanac Books. Statistics for individual languages with less than 1 million speakers are from Grimes 1992.

FIGURE FOUR II: SOME AMERICAN INDIAN LANGUAGES

Family	Branch	Group	Representative Languages	Principal Locations	Number of Speakers
Algonquian (15)			Cree	Canada; USA	46,700
			Ojibwa	Canada; USA	51,000
			Arapaho	Wyoming; W Oklahoma	1,500
			Blackfoot	S Alberta; Montana	9,000
Andean–Equatorial (163)	Andean		Quechua	Peru; Ecuador; Bolivia; Argentina	8,000,000
			Aymara	Bolivia; Peru	2,000,000
	Equatorial		Guarani	Paraguay	4,000,000
Eskimo–Aleut (9)	Eskimo		Inuit	Canadian Arctic; Greenland	68,500
			Yupik	Alaska; Siberia	17,000
	Aleut		Aleut	Aleutian Islands	700
Ge–Pano–Carib (117)			Carib	Northern South America	100,000
Hokan (28)	Yuman		Diegueño	Baja California	less than 400
	Tequistlatecan		Tequistlatec	Mexico	5,000
Iroquoian (7)			Mohawk	N New York	3,000
			Cherokee	E Oklahoma; W North Carolina	22,500
Caddoan (4)			Pawnee	N Central Oklahoma	200
Na–Dené (34)	Athapaskan		Tlingit	SE Alaska	2,000
			Navajo	New Mexico; Arizona; Utah	130,000
			Apache	Oklahoma; New Mexico; Arizona	14,300
			Chipewyan	N Alberta; Saskatchewan	4,000
Oto–Manguean (17)	Otomian		Zapotec	S Mexico	500,000
	Mixtecan		Mixtec	S Mexico	250,000
Penutian (68)			Nez Perce	N Idaho	500
	Mayan		Quiche	Guatemala	885,000
Mosan (27)			Squamish	SW British Columbia	20
Siouan–Yuchi (11)			Dakota (Sioux)	S Manitoba; Nebraska; Minnesota	19,000
			Crow	S Montana	5,500
			Winnebago	Wisconsin; E Nebraska	1,500
Uto–Aztec (25)			Hopi	NE Arizona	5,000
	Shoshonean		Comanche	W Oklahoma	500
	Takic		Luisiño	S California	100
	Sonoran		Huichol	Mexico	12,500
	Aztec		Nahuatl (Aztec)	Southern Mexico	1,000,000

FIGURE FOUR III: SOME INDO-EUROPEAN LANGUAGES

Family	Branch	Group	Representative Languages	Principal Locations	Number of Speakers
Indo-European (144)	Albanian		Albanian	Albania; Yugoslavia	5,000,000
	Anatolian		Hittite	Ancient Asia Minor	Extinct
	Armenian		Armenian	Armenia; Iran; Syria; Lebanon	5,000,000
	Balto-Slavic	Baltic	Lithuanian	Lithuania	3,000,000
			Latvian	Latvia	2,000,000
		Slavic	Russian	Russia	280,000,000
			Serbo-Croatian	Serbia; Croatia; Bosnia	20,000,000
			Czech	Czechoslovakia	12,000,000
			Polish	Poland	44,000,000
		Celtic	Brythonic	Welsh	Wales	580,000
	Goidelic		Irish	Ireland	120,000
	Germanic	East	Gothic	Eastern Europe	Extinct
		North	Danish	Denmark	5,000,000
			Norwegian	Norway	5,000,000
			Swedish	Sweden; Finland	9,000,000
		West	Dutch	Netherlands; Belgium	21,000,000
			English	England, America	487,000,000
			German	Germany	124,000,000
	Greek		Greek	Greece	12,000,000
	Indo-Iranian	Indic	Sanskrit	Ancient India	Extinct
			Bengali	Bangladesh; India	204,000,000
			Hindi	India	457,000,000
			Urdu	Pakistan; India	104,000,000
			Punjabi	India; Pakistan	95,000,000
		Iranian	Pashto	Afghanistan; Pakistan	21,000,000
			Persian	Iran; Afghanistan	35,000,000
Italic		Latin	Roman Empire	Extinct	
	Romance	French	France	125,000,000	
		Romanian	Romania; Moldova	26,000,000	
		Italian	Italy	62,000,000	
		Portuguese	Portugal; Brazil	186,000,000	
		Spanish	Spain; Central and South America	401,000,000	

FIGURE FOUR IV: SOME LANGUAGES OF EAST ASIA AND THE PACIFIC

Family	Branch	Group	Representative Languages	Principal Locations	Number of Speakers
Australian (170)	Pama–Nyungan		Walbiri	Australia	3,000
			Dyirbal	Australia	40 to 50
Austro–Asiatic (155)	Mon–Khmer		Khmer	Kampuchea; Vietnam; Thailand	9,000,000
			Vietnamese	Vietnam	63,000,000
			Nung	Vietnam; China	2,000,000
	Munda		Santali	E India; Nepal	5,000,000
	Nicobarese		Central Nicobarese	Nicobar Islands	5,000
Austronesian (959)	Formosan		Atayal	Taiwan	41,000
	Western		Malay–Indonesian	Indonesia; Thailand	164,000,000
			Toba Batak	Indonesia	4,000,000
			Javanese	Java	64,000,000
			Sundanese	Java	26,000,000
			Madurese	Madura	10,000,000
			Tagalog	Philippines	56,000,000
			Cebuano	Philippines	12,000,000
			Malagasy	Madagascar	12,000,000
	Oceanic		Samoan	Samoa	328,000
			Maori	New Zealand	100,000
			Tahitian	Tahiti	125,000
			Hawaiian	Hawaii	2,000
Indo–Pacific (731)			Motu	Papua New Guinea	15,000
Sino–Tibetan (258)	Tibeto–Burman		Tibetan	SW China; N India; Nepal	5,000,000
			Burmese	Myanmar (Burma)	31,000,000
			Newari	Nepal	500,000
	Sinitic	Mandarin	Mandarin	China	999,000,000
		Wu	Wu	Chiang Jiang delta, China	65,000,000
		Min	Taiwanese	Taiwan	50,000,000
		Yue	Cantonese	Guangdong province, China	70,000,000
		Hakka	Hakka	SE China	34,000,000
Tai (57)			Thai	Thailand	52,000,000
			Shan	E Myanmar (Burma)	3,000,000
			Lao	Thailand; Laos	4,000,000

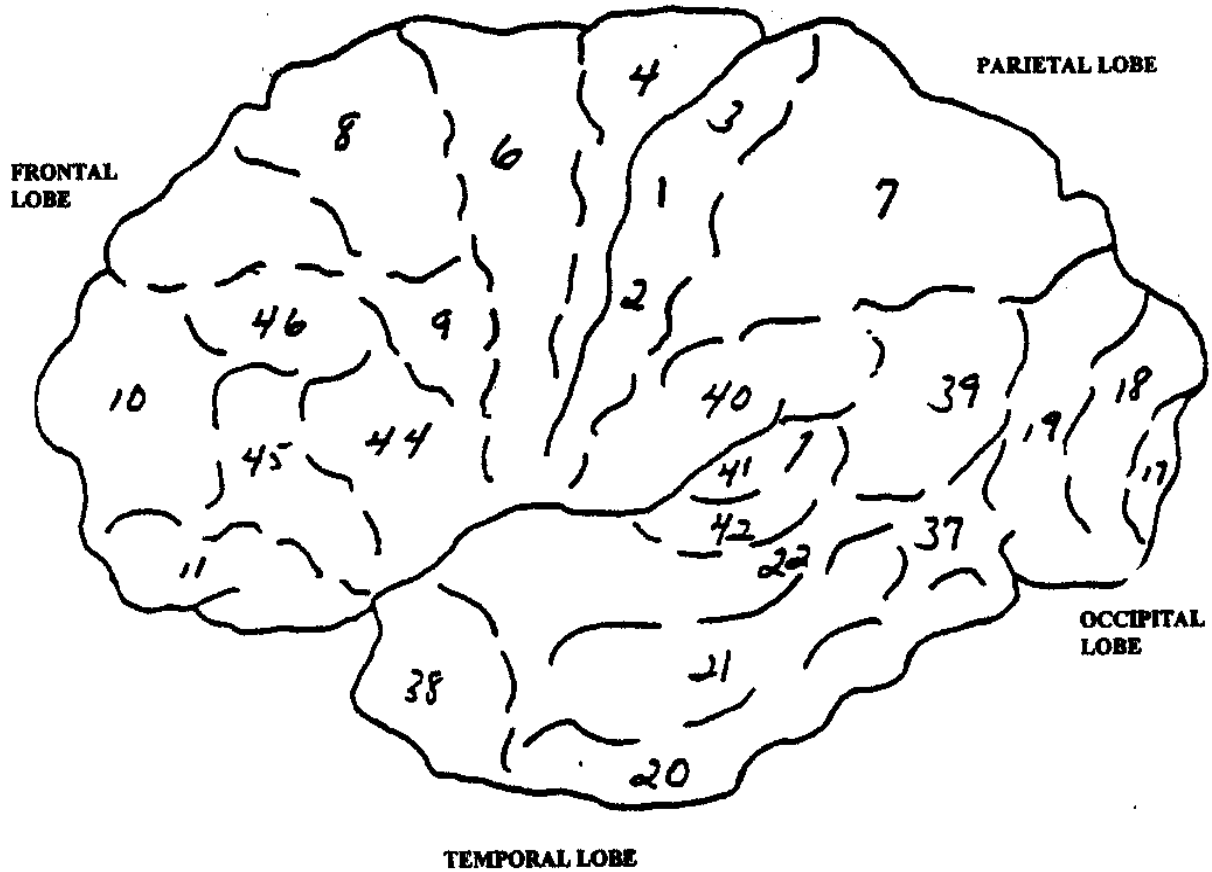
FIGURE FOUR V: SOME OTHER LANGUAGES OF EUROPE AND ASIA

Family	Branch	Group	Representative Languages	Principal Locations	Number of Speakers
Altaic (63)	Turkic		Turkish	Turkey	61,000,000
			Azerbaijani	Azerbaijan; Iran; Turkey	15,000,000
			Tartar	Russia	8,000,000
			Uzbek	Uzbekistan	14,000,000
	Mongolian		Mongol	Mongolian People's Republic	6,000,000
	Manchu-Tungus		Evenki	Russia	24,000
			Manchu	Northeast China	less than 1,000
	Japanese		Japanese	Japan	126,000,000
Korean		Korean	North Korea; South Korea	76,000,000	
Caucasian (38)	Kartvelian		Georgian	Georgia; Azerbaijan; Turkey	4,000,000
			Svan	Georgia	35,000
	Northwest		Kabardian	Northwest Caucasus; Russia	370,00
	Northeast	Dagestanian	Avar	Northeast Caucasus	483,000
			Lezgian (Lezgi)	Russia; Azerbaijan	383,000
		Nakh	Chechen	Chechnia	945,000
Dravidian (28)			Telugu	Southeast India	75,000,000
			Tamil	India; Sri Lanka	73,000,000
			Kannada	S India	45,000,000
			Malayalam	S India	36,000,000
Paleosiberian (5)			Chukchi	Northeast Siberia	10,900
Uralic (24)	Finno-Ugric	Finnic	Finnish	Finland	6,000,000
			Estonian	Estonia	1,000,000
		Ugric	Hungarian	Hungary	14,000,000
	Samoyedic		Nenets	Arctic Russia	27,000

FIGURE FIVE: SOME ALPHABETS

FIGURE FIVE: SOME ALPHABETS										
ROMAN	GREEK			CYRILLIC			HEBREW		ARABIC	
A a	!	"	alpha	!	"	a	א	אֵפֶה, אֵפֶף	[\	ا
B b	#	\$	beta	#	\$	be	ב	b' th	] `	ب~
C c	'	(	gamma	%	&	ve	ג	gimel	a d	t~
D d	)	*	delta	'	(	ge	ד	d-leth	e h	th~
E e	+	,	epsilon	)	*	de	ה	h'	i l	jim
F f	-	.	zeta	+	,	je	ו	vav, waw	m p	h~
G g	/	o	eta	-	.	jo	ז	zayin	q t	kh~
H h	1	2	theta	/	o	že	ח	ħeth	u v	d-i
I i	3	4	iota	1	2	ze	ט	ṭeth	w x	dh-i
J j	5	6	kappa	3	4	i	י	yod, yodh	y z	r~
K k	7	8	lambda	5	6	í krátko	כ, ך	k-ph	{ |	z-y
L l	9	:	mu	7	8	ka	ל	lamedh	}	sin
M m	;	<	nu	9	:	el	מ, ם	m'm	, ...	shin
N n	=	>	xi	;	<	em	נ	nān	† %	š-d
O o	?	@	omicron	=	>	en	ס	samekh	š	š-d
P p	A	B	pi	?	@	o	ע	ayin	'	ṭ~
Q q	C	D	rho	A	B	pe	פ, ף	p'	' •	z~
R r	E	F, H	sigma	C	D	er	צ, ץ	sade, šadhe	- ™	š
S s	I	J	tau	E	F	es	ק	qaph	š	ghayn
T t	K	L	upsilon	G	H	te	ר	r'sh	i	f~
U u	M	N	phi	I	J	u	ש	sin	¢ ¥	q-f
V v	O	P	chi	K	L	ef	שׁ	shin	! ©	kaf
W w	Q	R	psi	M	N	xa	ת	t-v, t-w	a -	lam
X x	S	T	omega	O	P	ce			® ±	mim
Y y				Q	R	š			² μ	nun
Z z				S	T	ša			¶ ¹	h~
				U	V	š			¼ ½	w-w
				W	X	tBrđij znak			¾ Á	y~
				Y	Z	i				
				[\		rBxkq znak				
				] ^		e				
				- `		ju				
				a b		ja				

FIGURE SIX: THE HUMAN BRAIN



- | | |
|--------|---|
| 1,2,3: | Primary sensory cortex |
| 7: | Secondary sensory area |
| 4,6: | Primary motor cortex |
| 9: | Motor area for the hand (Exner's center) |
| 44: | Motor area for the face (Broca's area) |
| 40: | Supramarginal gyrus |
| 39: | Angular gyrus |
| 17: | Primary visual area |
| 18,19: | Secondary visual area |
| 41,42: | Primary auditory area |
| 22: | Secondary auditory area (Wernicke's area) |

LANGUAGES AND LANGUAGE FAMILIES, BRANCHES AND GROUPS
(Roman numerals in square brackets refer to Figure Four)

Adamawa–Ubangian [I]	Chechen [V]	Hamitic [I]
Afro–Asiatic [I]	Cherokee [II]	Hausa [I]
Akan [I]	Chipewyan [III]	Hawaiian [IV]
Albanian [III]	Chukchi [V]	Hebrew [I]
Aleut [II]	Comanche [II]	Hindi [III]
Algonquian [II]	Cree [II]	Hittite [III]
Altaic [V]	Crow [II]	Hokan [II]
Amharic [I]	Cushitic [I]	Hopi [II]
Anatolian [III]	Czech [III]	Hottentot [I]
Andean [II]	Dagestanian [V]	Huichol [II]
Andean–Equatorial [II]	Dakota [II]	Hungarian [V]
Apache [II]	Danish [III]	Ibo [I]
Arabic [I]	Diegueño [II]	Igbo [I]
Arapaho [II]	Dravidian [V]	Indic [III]
Armenian [III]	Dutch [III]	Indo–European [III]
Atayal [IV]	Dyirbal [IV]	Indo–Iranian [III]
Athapaskan [II]	East Germanic [III]	Indo–Pacific [IV]
Australian [IV]	Efik [I]	Inuit [II]
Austronesian [IV]	English [III]	Iranian [III]
Austro–Asiatic [IV]	Equatorial [II]	Irish [III]
Avar [V]	Eskimo [II]	Iroquoian [II]
Aymara [II]	Eskimo–Aleut [II]	Italian [III]
Azerbaijani [V]	Estonian [V]	Italic [III]
Aztec [II]	Evenki [V]	Japanese [V]
Aztecán [II]	Ewe [I]	Javanese [IV]
Baltic [III]	Finnic [V]	Kabardian [V]
Balto–Slavic [III]	Finnish [V]	Kabyle [I]
Bantu [I]	Finno–Ugric [V]	Kannada [V]
Bengali [III]	Formosan [IV]	Kartvelian [V]
Benue–Congo [I]	French [III]	Khmer [IV]
Berber [I]	Fula [I]	Khoisan [I]
Blackfoot [II]	Galla [I]	Korean [V]
Brythonic [III]	Georgian [V]	Kwa [I]
Burmese [IV]	German [III]	Lao [IV]
Caddoan [II]	Germanic [III]	Latin [III]
Cantonese [IV]	Ge–Pano–Carib [II]	Latvian [III]
Carib [II]	Goidelic [III]	Lezgi [V]
Caucasian [V]	Gothic [III]	Lezgian [V]
Cebuano [IV]	Greek [III]	Lithuanian [III]
Celtic [III]	Guarani [II]	Luiséño [II]
Central Nicobarese [IV]	Gur [I]	Luo [I]
Chadic [I]	Hakka [IV]	Maasai [I]

- Madurese [IV]
 Malagasy [IV]
 Malayalam [V]
 Malay–Indonesian [IV]
 Manchu [V]
 Manchu–Tungus [V]
 Mandarin [IV]
 Mande [I]
 Maori [IV]
 Mayan [II]
 Mende [I]
 Min [IV]
 Mixtec [II]
 Mixtecan [II]
 Mohawk [II]
 Mongol [V]
 Mongolian [V]
 Mon–Khmer [IV]
 More [I]
 Mosan [II]
 Motu [IV]
 Munda [IV]
 Nahuatl [II]
 Nakh [V]
 Nama [I]
 Navajo [II]
 Na–Dené [II]
 Nenets [V]
 Newari [IV]
 Nez Perce [II]
 Nicobarese [IV]
 Niger–Congo [I]
 Nilotic [I]
 Nilo–Hamitic [I]
 Nilo–Sarahan [I]
 North Germanic [III]
 Northeast Caucasian [V]
 Northwest Caucasian [V]
 Norwegian [III]
 Nung [IV]
 Oceanic [IV]
 Ojibwa [II]
 Omotic [I]
 Oromo [I]
 Otomian [II]
- Oto–Manguean [II]
 Paleosiberian [V]
 Pama–Nyungan [IV]
 Pashto [III]
 Pawnee [II]
 Penutian [II]
 Persian [III]
 Polish [III]
 Portuguese [III]
 Punjabi [III]
 Quechua [II]
 Quiche [II]
 Romance [III]
 Romanian [III]
 Russian [III]
 Samoan [IV]
 Samoyedic [V]
 Sandawe [I]
 Sango [I]
 Sanskrit [III]
 Santali [IV]
 Semitic [I]
 Serbo–Croatian [III]
 Shan [IV]
 Shilha [I]
 Shoshonean [II]
 Sinitic [IV]
 Sino–Tibetan [IV]
 Siouan–Yuchi [II]
 Sioux [II]
 Slavic [III]
 Somali [I]
 Sonoran [II]
 Spanish [III]
 Squamish [II]
 Sundanese [IV]
 Svan [V]
 Swahili [I]
 Swedish [III]
 Tagalog [IV]
 Tahitian [IV]
 Tai [IV]
 Taiwanese [IV]
 Takic [II]
 Tamazight [I]
- Tamil [V]
 Tartar [V]
 Telugu [V]
 Tequistlatec [II]
 Tequistlatecan [II]
 Thai [IV]
 Tibetan [IV]
 Tibeto–Burman [IV]
 Tigrinya [I]
 Tiv [I]
 Tlingit [II]
 Toba Batak [IV]
 Turkic [V]
 Turkish [V]
 Ugric [V]
 Uralic [V]
 Urdu [III]
 Uto–Aztecan [II]
 Uzbek [V]
 Vietnamese [IV]
 Voltaic [I]
 Walbiri [IV]
 Welsh [III]
 West Germanic [III]
 West Atlantic [I]
 Western Austronesian [IV]
 Winnebago [II]
 Wolaytta [I]
 Wolof [I]
 Wu [IV]
 Xhosa [I]
 Yoruba [I]
 Yue [IV]
 Yuman [II]
 Yupik [II]
 Zapotec [II]
 Zulu [I]

TERMS

The main entries throughout this glossary are in **BOLDFACE UPPERCASE TYPE**; expressions meaning the same thing as a main entry are surrounded by double quotes. References to main entries found in other entries are in SMALL CAPITALS; specialized expressions that occur as part of main entries are in *italics*. Words used as words are also in italics, e.g., the word *the*. These changes in type face are seen in the following entry:

BODY LANGUAGE — the use of facial expressions, gestures, and other movements for the purpose of communication. Also called “paralanguage” and “kinesics.” There are five major categories of body language. *Illustrators* are movements that accompany SPEECH as an illustration, such as the movement an arm in a circular fashion while saying something like *and so on*. *Emblems* are movements that are used as a replacement for speech, such as a wave goodbye or extending the thumb to hitch a ride. *Adaptors* are unconscious movements indicating one’s emotional state, such as nail biting and running fingers through one’s hair. *Affect displays* are facial expressions like smiling, frowning and yawning. *Regulators* are gestures which control the flow of conversation, such as staring, slouching, shuffling papers, etc.

Sometimes, definitions contain successive words in small capitals which must be looked up separately; for example, to find the meaning of VOWEL LENGTH, one must look up the entry **VOWEL** and the entry **LENGTH**.

A number of very general grammatical terms like NOUN, VERB, and CLAUSE occur repeatedly in definitions. As a result, the user of this glossary may wish to consult the review sections, beginning on Page 7, for a summary of basic terminology used in the formal study of language and related disciplines.

ABESSIVE CASE — an INFLECTION in SUB STANTIVES (nouns, pronouns, etc.) generally used to express the idea *without*. For example, in Estonian, the phrase *ilma teieta* means ‘without you’; it consists of the PREPOSITION *ilma* meaning ‘without’ and the PRONOUN *teie* ‘you’ with the abessive case ending *-ta*. Compare NONCOMITATIVE and NONINSTRUMENTAL.

ABESSIVE (ABE) — the positional THEMATIC RELATION expressing the location away, e.g., *He was away from the tree* and *The balloon was away from the ceiling*.

ABLATIVE CASE (ABL) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to indicate separation or source. For example, in the Latin sentence *Roma profectus est* ‘He set out from Rome,’ the word *Roma* is in the ablative case indicating the place from which he set out.

ABLATIVE (ABL) — the positional THEMATIC RELATION expressing motion away, e.g., *He walked away from the tree* and *The balloon floated away from the ceiling*. Compare ALLATIVE.

ABLAUT — a variation in the quality of a VOWEL, usually in a ROOT, associated with a systematic change in meaning, e.g., the variation in English seen in *bite/bit*, *steal/stole*, *give/gave*, *get/got*, etc. Originally, in PROTO-INDO-EUROPEAN, such variations were regularly associated with particular differences; over time, however, the basis for the regularities has become obscured in the various DAUGHTER LANGUAGES although the ancient forms still exist. Generally, the older the language is, the more principled the variation is. In Latin, ablaut is one of the ways to form different STEMS of verbs. For example, the PRESENT stem of some verbs contains the vowel [a] while the PERFECT stem has the vowel [e]: *ago* ‘I do’ versus *egi* ‘I have done’; *facio* ‘I make’ versus *feci* ‘I have made’; *capio* ‘I take’ versus *cepi* ‘I have taken.’ The systematic nature of these variations has completely disappeared in Modern English so that the various forms that still show ablaut are now considered irregular. Also called “apophony.”

ABSENTIVE (ABS) — the positional THEMATIC RELATION expressing the location where an entity isn’t, e.g., *He was off the horse* and *She is out of the office*.

ABSOLUTIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) in languages like Eskimo and Newari generally used to indicate the SUBJECT of an INTRANSITIVE VERB and the OBJECT of a TRANSITIVE VERB. Compare ERGATIVE CASE.

ABSTRACT NOUN — a noun that names intangible things, e.g., *admiration*, *gravity*, and *love*, as opposed to CONCRETE NOUN which names tangible things, e.g., *car*, *table*, and *house*.

ACCENT — (i) the particular speech pattern of a speaker or group of speakers; (ii) emphasis given to a particular SYLLABLE in a word, e.g., the word *unlikely* is accented on the syllable *like*. See STRESS.

ACCEPTABLE versus **UNACCEPTABLE** — an acceptable SENTENCE is one that can be processed by a human brain, e.g., *Lucy began stuffing into her mouth all the chocolates which were*

coming down the conveyor belt too fast to put into wrappers even though Ethel was trying hard to help her. An unacceptable SENTENCE is one that the human brain has difficulty processing, e.g., *Lucy began stuffing all the chocolates which were coming down the conveyor belt too fast to put into wrappers even though Ethel was trying hard to help her into her mouth.* See GARDEN PATH SENTENCE. Compare GRAMMATICAL versus UNGRAMMATICAL.

ACCIDENTAL GAP versus **NONACCIDENTAL GAP** — an accidental gap is a sequence of sounds which could be a word in a language; for example, *blick* [blɪk] could be an English word, but it just doesn't happen to be one. A nonaccidental gap is a sequence of sounds which cannot be a word in a language; for example, *ftick* [ftɪk] cannot be an English word because no English word can begin with an [f] followed by a [t]. See PHONOTACTIC RULE and SYLLABLE

ACCUSATIVE CASE (ACC) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the DIRECT OBJECT of a VERB (*him* in *She saw him*) or the OBJECT of a PREPOSITION (*her* in *He gave it to her*). Often called “objective case.” Compare NOMINATIVE.

ACOUSTIC PHONETICS — a branch of PHONETICS which deals with the way speech sounds are transmitted through the air as sound waves. Specialized instruments measure the properties of sound waves such as their FREQUENCY and AMPLITUDE.

ACRONYM — a word formed usually from the first sounds in successive words, e.g., the word *laser* is formed from *light amplification by stimulated emission of radiation*. Sometimes acronyms are spelled in uppercase letters (capitals), e.g., NATO for North Atlantic Treaty Organization.

ACTION CHAIN — A term used in COGNITIVE GRAMMAR to describe the progress of the action in a typical CLAUSE with a TRANSITIVE VERB such as *The man hit the ball*. An action chain is described as originating with an agent (called the “energy source”) and terminating in a patient (called the “energy sink”). Further, the SUBJECT and DIRECT OBJECT assume their typical values: the former codes the agent, and the latter codes the patient.

ACTIVE VOICE — an INFLECTION in VERBS in which the SUBJECT is viewed as performing the action defined in the verb, e.g., *John killed the tigers*, as opposed to the PASSIVE VOICE where the subject is viewed as being acted upon, e.g., *The tigers were killed by John*.

ACUTE/ACUTE ACCENT — the name of the DIACRITIC **´** used most often to indicate a change in vowel quality or accent in various languages, e.g., á, é, í, ó, ú.

ADAPTORS — see BODY LANGUAGE.

ADESSIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express the idea *near*. For example, in Estonian, the phrase *kohvikul* (ROOT *kovik-*) means ‘near the coffee house.’

ADESSIVE (ADE) — the positional THEMATIC RELATION expressing a location near, e.g., *He was near the tree* and *The balloon was near the ceiling*.

ADJECTIVAL SUBORDINATION — any CLAUSE or PHRASE that functions like an ADJECTIVE, that is, modifies a NOUN. For example, *with a beard* is a PREPOSITIONAL PHRASE that modifies the noun *man* in *the man with a beard* (cf. *the bearded man*). Compare ADVERBIAL SUBORDINATION.

ADJECTIVE (A or ADJ) [adj: **ADJECTIVAL**] — An adjective is a word that qualifies, limits, or otherwise modifies the meaning of a NOUN, e.g. *pretty*, *little*, and *yellow* in *the pretty, little, yellow house*. Adjectives can generally occur in three degrees: *pretty*, *tall*, *beautiful* (POSITIVE DEGREE); *prettier*, *taller*, *more beautiful* (COMPARATIVE DEGREE); and *prettiest*, *tallest*, *most beautiful* (SUPERLATIVE DEGREE).

ADJECTIVE PHRASE (AP) — a PHRASE whose HEAD is an ADJECTIVE, e.g., the adjective phrase *totally dependent on his parents* contains the adjective *dependent* as its head.

ADJUNCT — any type of SPECIFIER or MODIFIER, e.g., *the*, *pretty*, and *on the hill* in the NOUN PHRASE *the pretty house on the hill*, or *beautifully* in the VERB PHRASE *sing beautifully*.

ADJUNCTION — a type of MOVEMENT in TRANSFORMATIONAL GRAMMAR. Adjunction of Y to X creates a new node X which immediately dominates X and Y.

ADNOMINAL — specifying or modifying a NOUN HEAD, e.g., the PHRASE *the young man with the beard* contains three adnominal expressions: the SPECIFIER *the*, the ADJECTIVE *young*, and the PREPOSITIONAL PHRASE *with the beard* (=bearded).

ADVERB (ADV) [adj: **ADVERBIAL**] — an adverb is a word that modifies a VERB or an ADJECTIVE, e.g., *quickly* in *John ran quickly*, and *unbelievably* in *John is unbelievably clever*. Adverbs can generally occur in three degrees: *quickly*, *beautifully*, *probably* (POSITIVE DEGREE); *more quickly*, *more beautifully*, *more probably* (COMPARATIVE DEGREE); and *most quickly*, *most beautifully*, *most probably* (SUPERLATIVE DEGREE). See MANNER ADVERB and SENTENCE ADVERB.

ADVERB PHRASE (ADVP) — a PHRASE whose HEAD is an ADVERB, e.g., the adverb phrase *more beautifully that you could imagine* contains the adverb *beautifully* as its head.

ADVERBIAL SUBORDINATION — any CLAUSE or PHRASE that functions like an ADVERB. For example, *at an inappropriate time* is a PREPOSITIONAL PHRASE that modifies the VERB *laugh* in *She laughed at an inappropriate time* (cf. *She laughed inappropriately*). Compare ADJECTIVAL SUBORDINATION

AFFECT DISPLAYS — see BODY LANGUAGE.

AFFECTIVE (AFC) — the THEMATIC RELATION indicating the ANIMATE or INANIMATE entity directly affected by the state or action identified in the PREDICATE, e.g., *ice* in *The sun melted the ice* and *The ice melted*. Compare EFFECTIVE (EFC). Also called “experiencer” or “dative.”

AFFERENTIAL (AFR) — the THEMATIC RELATION indicating the quasi-POSITIONAL entity to which an action is directed, e.g., *Bill* in *John sold the car to Bill* and *Bill bought the car from John*. Compare EFFERENTIAL (EFR). Also called “recipient.”

AFFIX — a BOUND MORPHEME added to either the beginning of a word (a PREFIX, e.g., *un-* in *unlikely*) or to the end of a word (a SUFFIX, e.g., *-ly* in *unlikely*).

AFFRICATE — a CONSONANT that combines a complete closure at some point in the VOCAL TRACT followed by a turbulent release characteristic of a FRICATIVE, e.g., [tʃ] as in *cheap* and [ʒ] as in *jeep*.

AGENT — the THEMATIC RELATION indicating the typically ANIMATE perceived instigator of the action identified in the verb. See EFFECTIVE.

AGENTIVE — see AGENT and EFFECTIVE.

AGGLUTINATING LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of a STEM and one or more clearly identifiable AFFIXES. Finnish, Hungarian, Estonian, Swahili, and Turkish are agglutinating languages. See also SYNTHETIC LANGUAGE.

AGNOSIA — an impairment in identifying and recognizing objects. In *visual agnosia*, individuals cannot recognize object by sight; although the objects are seen, patients cannot name the objects or explain their function. In *tactile agnosia*, a blindfolded patient cannot recognize objects by touch.

AGRAMMATISM — an impairment of the ability to combine words into appropriate SYNTACTIC STRUCTURES often characterized by the OMISSION of DETERMINERS, PREPOSITIONS, and CONJUNCTIONS which bind words together into coherent PHRASES.

AGRAPHIA [adj: **AGRAPHIC**] — loss of the ability to write generally as a result of injury to the brain. Compare DYSGRAPHIA.

AGREEMENT — a formal relationship between elements of a PHRASE or CLAUSE whereby the form of one element requires a corresponding form in another element. For example, in English DETERMINERS must agree with the NOUNS they specify in NUMBER: we say *this book* or *these books*, but neither **this books* nor **these book*.

ALEXIA [adj: **ALEXIC**] — loss of the ability to read generally as a result of injury to the brain. Compare DYSLEXIA.

ALGEBRA — a branch of mathematics concerned with the relationships and properties of quantities, which are manipulated in symbolic form, and with the formulation of equations used to solve problems. For example, the equation $x \times 1 = x$ expresses the fact that any number (x) times the number one (1) equals that number (x): $1 \times 1 = 1$, $2 \times 1 = 2$, $3 \times 1 = 3$, etc.

ALGORITHM — a formal step by step procedure for solving a problem or achieving some goal, such as the specific ROUTINES used in PARSING a sentence in COMPUTATIONAL LINGUISTICS.

ALIENABLE versus **INALIENABLE** — Broadly, alienable objects or attributes are transferrable, while inalienable ones are not. For example, clothing is an alienable object and poverty is an alienable attribute: clothing can be bought and sold; poverty can be a temporary condition. On the other hand, one's children and one's eye color are inalienable: a parent does not cease to be a natural parent even when children are given up for adoption; the natural color of one's eyes does not change when colored contact lenses are worn.

ALIENABLE NONPOSSESSOR (NAPS) — the THEMATIC RELATION indicating the entity lacking an ALIENABLE object or attribute, e.g., *John* in *John doesn't have a car* and *John isn't rich*.

ALIENABLE POSSESSION — alienable possession refers to the possession of relatively transient and extrinsic objects or attributes (e.g., one's home, one's money), whereas INALIENABLE POSSESSION is the possession of relatively permanent, intrinsic objects or attributes (e.g., one's children, one's blue eyes, one's ambition).

ALIENABLE POSSESSOR (APS) — the THEMATIC RELATION indicating the possessor of ALIENABLE objects or attributes, e.g., *John* in *John has a car* and *John is rich*.

ALLATIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark motion towards. For example, in Estonian, the phrase *kohvikule* (ROOT *kovik-*) means 'to the coffee house.'

ALLATIVE (ALL) — the POSITIONAL THEMATIC RELATION expressing motion towards, e.g., *He walked toward the tree* and *The balloon floated toward the ceiling*. Compare ABLATIVE.

ALLITERATION — a FIGURE OF SPEECH in which successive words begin with the same sound, e.g., *with my grip will I grapple the gruesome fiend*.

ALLOMORPH [adj: **ALLOMORPHIC**] — a predictable (rule-governed) PHONETIC variation of a MORPHEME. For example, the PLURAL morpheme in English nouns is variously pronounced [ɹ] as in *busses*, [s] as in *bucks*, and [z] as in *bugs*. The occurrence of each of these allomorphic variants is predictable in terms of the phonetic environment in which the PLURAL morpheme occurs. If the morpheme occurs after [s], [z], [š], [ž], [ʃ], or [ʒ] (a sound that is [+SIBILANT]), it is realized phonetically as [ɹ], e.g., *dresses*, *sizes*, *ashes*, *judges*, etc. Otherwise, if it occurs after a VOICELESS CONSONANT, it is realized phonetically as [s], e.g., *tanks*, *pipes*, *slots*; if it occurs after a VOICED CONSONANT or after a VOWEL, it is realized phonetically as [z], e.g., *bulbs*, *trees*, *eggs*.

ALLOPHONE [adj: **ALLOPHONIC**] — a conditioned phonetic variation of a PHONEME. The phoneme /p/ is realized phonetically as its allophone [p] (UNASPIRATED) when it occurs after [s], e.g., in the words *spot*, *stick*, *scoop*, etc. The phoneme /p/ is realized phonetically as its allophone [p^h] (ASPIRATED) in all other environments, e.g., in the word *pot*, *tick*, *coop*, etc.

ALPHA-NOTATION — a notational convention in linguistics using the Greek letters " (alpha), \$ (beta), ((gamma), etc. to represent VARIABLES in a rule. The value of any one Greek letter is constant throughout a rule so that " equals the value "+" everywhere or "-" everywhere. For example, we express VOICING ASSIMILATION as (i) which means both (ii) and (iii):

- (i) ["VOICE] ÷ [-"VOICED] / ____ [-"VOICED]
- (ii) [+VOICE] ÷ [-VOICED] / ____ [-VOICED]
- (iii) [-VOICE] ÷ [+VOICED] / ____ [+VOICED]

ALPHABET — a set of letters or characters with which one or more languages is written.

ALPHABETIC WRITING — see WRITING.

ALTERNATIVE ELEMENTS — elements in PHRASE STRUCTURE RULES and PHONOLOGICAL RULES which can occur in place of each other. For example, in English, the TENSE of a VERB can be either PRESENT, PAST or FUTURE. Alternative elements are placed inside of CURLY BRACKETS as follows:

TENSE ÷ {PRESENT, PAST, FUTURE} or
TNS ÷ {PRS, PST, FUT}

ALVEOLAR — a constriction formed by placing the tongue against the ALVEOLAR RIDGE as in the articulation of sounds like [t], [d], [n], etc.

ALVEOLAR RIDGE — the bony ridge behind the upper teeth. See Figure One on Page 15.

AMERICAN SIGN LANGUAGE (AMESLAN or ASL) — the SIGN LANGUAGE used by the deaf community in America.

AMBIGUITY [adj: **AMBIGUOUS**] — the association of one sequence of sounds with more than one meaning, e.g., the word *bank* can refer to a financial institution (*a commercial bank*), a rising level of ground adjacent to a body of water (*a bank of a river*), a series of objects arranged in a row or a tier (*a bank of elevators*), etc.

AMPLITUDE — the degree of loudness of a sound measured in decibels (abbreviated dB). A whisper generally has a value of about 25 to 30 decibels; normal conversation, 50 to 60 decibels; rock music, 110 to 120 decibels. Further increases in decibel level result in pain and damage.

ANALOGY [adj: **ANALOGOUS**] — the resemblance between different linguistic forms which serves as the basis for the creation of another form, in particular, the process of extending regular patterns to irregular ones in children. For example, having heard words like *boys, girls, trucks, toys*, etc., a child may, by analogy, produce forms like *mans, womans, foots*, etc. Having heard forms like *played, jumped* and *walked*, a child might make up forms like *goed, runned, throwed*, and *singed*. Also called “overgeneralization.”

ANALYTIC LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of single MORPHEMES or where the most words consist only of a ROOT. Mandarin Chinese, Vietnamese, Cantonese, and Cambodian are analytic languages. Also called “isolating language.” See Figure Two I on Page 16.

ANAPEST — a metrical FOOT consisting of two short or unstressed syllables followed by one long or STRESSED SYLLABLE (˘ ˘ –), as in the words *guarantee, tennessee, kangaroo*, etc.

ANAPHOR [adj: **ANAPHORIC**] — an item that requires a REFERENT, e.g., the pronoun *himself* in *John saw himself in the mirror*. Sometimes the term *anaphor* is restricted to an item that is bound to a preceding REFERENT as opposed a CATAPHOR, which is bound to a following referent. See REFERENCE.

ANAPHORA — the study of REFERENCE.

ANATOLIAN LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes Hittite, Lydian, Luwian, etc. The discovery and decipherment of Hittite in the early 1900s helped to confirm the LARYNGEAL HYPOTHESIS and has been very important in INDO-EUROPEAN studies because the surviving inscriptions and manuscripts are very old (1700–1200 B.C.).

ANIMATE — a SEMANTIC CATEGORY referring to living things, generally animals including humans. Opposed to INANIMATE.

ANOMALY [adj: **ANOMOLOUS**] — a strange, contradictory or meaningless expression such as *an odorless smell*. Sentences are often anomalous for reasons that have nothing to do with language itself. For example, *George Washington has slept here* is anomalous under the interpretation that George Washington refers to the first US president; *has slept* is appropriate only for someone who is alive.

ANOMIA — loss or impairment of the ability to recall or recognize the names of persons, places, or things generally as a result of injury to the brain.

ANTEPENULT — the third to the last syllable of a word, e.g., the syllable *un* in *unlikely*.

ANTERIOR ([+ANT]) versus **NONANTERIOR** ([–ANT]) — a PHONETIC FEATURE OPPOSITION. Anterior sounds are produced with an obstruction that is located in front of the palato-alveolar

region of the mouth, e.g., [p], [b], [t] and [d]; nonanterior sounds are produced without such an obstruction, e.g., [k] and [g].

ANTITHESIS — a FIGURE OF SPEECH in which one term or phrase is contrasted with another as in *Welfare promises assistance but produces dependence*.

ANTONYM — antonyms are words that have opposite meanings. e.g., the VERBS *enter* and *exit*, the ADJECTIVES *hot* and *cold*, the PREPOSITIONS *up* and *down*, etc. See COMPLEMENTARY ANTONYM and GRADABLE ANTONYM.

APHASIA [adj: **APHASIC**] — the loss of the ability to use and/or understand language as result of some injury to the brain. See WERNICKE'S APHASIA and BROCA'S APHASIA. Compare DYSPHASIA.

APOCOPE — the loss of a sound at the end of a word, e.g., the reduction of Old English *singan* to *sing* or of Modern English *singing* to *singin'* as in *singin' in the rain*.

APOPHONY — equivalent to ABLAUT.

APOSTROPHE — a FIGURE OF SPEECH that involves addressing someone or something that is not present as though present, as in *Death, be not proud, though some have called thee Mighty and dreadful...* (John Donne).

APPOSITION — a syntactic construction in which two adjacent phrases have the same REFERENT and stand in the same GRAMMATICAL RELATION to the rest of the clause. In *Merlin, the magician, has disappeared*, the noun phrases *Merlin* and *the magician* are in apposition to each other.

APRAXIA — the inability to carry out motor acts correctly as a result of injury to the brain. In *ideomotor apraxia*, individuals are unable to perform motor acts like nodding the head on command although the same acts can be carried out spontaneously in response to a situation. In *ideational apraxia*, individuals cannot plan movements or carry out a complex sequence of movements such as retrieving and putting on a pair of glasses.

ARBITRARY versus **NONARBITRARY** — something is arbitrary if it is established by convention, tradition or personal preference, e.g., the use of [i] to represent the sound of *ee* in *see* or the use of the English word *table* to represent the object so named. Something is nonarbitrary if it is established by independent justification or necessity. For example, the sounds of human language are produced by expelling air out the nose (NASAL) or the mouth (ORAL); there is no sound in any language that is produced by expelling air out the ears (AURAL) because human beings cannot do that. The fact that languages generally have NASAL and ORAL sounds and never have AURAL sounds is, therefore, nonarbitrary.

ARCUATE FASCICULUS — a bundle of nerve fibers connecting BROCA'S AREA and WERNICKE'S AREA. See CONDUCTION APHASIA.

ARGOT — another word for JARGON.

ARGUMENT — (i) an entity named in a PROPOSITION or SENTENCE as required by or associated with a PREDICATE. For example, in *The hunter killed the tigers*, *hunter* and *tigers* are the arguments and *killed* is the PREDICATE. (ii) that part of the structure of a SPEECH which contains the proof or rebuttal of the situation or topic described in the EXORDIUM.

ARROW — the symbol “ \div ” used in a rule to indicate that the item on the left becomes the item on the right. See SLASH—DASH NOTATION and PHRASE STRUCTURE RULE.

ARTICLE — a class of words which specifies a NOUN, e.g., *a* in *a book*. Also called “determiner.”

ARTICULATION — the process of making a sound or sounds.

ARTICULATORY APPARATUS — all of the vocal organs and structures in humans used to form the various sounds of human languages including the VOCAL TRACT, ALVEOLAR RIDGE, PALATE, VELUM, tongue, lips, teeth, etc. Also called “vocal apparatus.”

ARTICULATORY PHONETICS — a branch of PHONETICS which deals with the way sounds are produced by the VOCAL APPARATUS. For example, the sound [b] is produced by making a complete closure (STOP) and the two lips (BILABIAL) with simultaneous vibration of the vocal cords (VOICING) and raising of the velum so that the air is expelled from the mouth (NONNASAL).

ARTIFICIAL INTELLIGENCE (AI) — a branch of computer science concerned with the ability of machines to execute complex tasks normally associated with human beings such as perceiving, identifying and classifying objects, learning and solving problems from past experience, developing new strategies, and, in general, engaging in any intellectual task that involves reasoning.

ARTIFICIAL LANGUAGE — a language that is made up such as Esperanto and Klingon as opposed to one that occurs naturally such as English or Chinese. Compare NATURAL LANGUAGE.

ASPECT (ASP) — an INFLECTION in VERBS generally used to indicate whether an action is completed (PERFECTIVE as in *He has written to her*) or continuous (PROGRESSIVE as in *He is writing to her*).

ASPIRATED versus **UNASPIRATED** — a PHONETIC FEATURE OPPOSITION. Aspirated sounds are articulated with a perceptible puff of air, e.g., [p^h] in [p^hæt] (*pat*); unaspirated sounds are articulated without a perceptible puff of air, e.g., [p] in [spæt] (*spat*). The difference can be seen if one holds a tissue in front of one’s mouth and says the words *pat*, *pit*, *pot* and then *spat*, *spit*, *spot*.

ASSERTION — a STATEMENT made positively (*He went*) as opposed to negatively (*He didn’t go*).

ASSIMILATION [adj: **ASSIMILATORY**] — the process of making adjacent sound segments similar in DISTINCTIVE FEATURE composition, e.g., the MORPHEME /skr~~v~~ ‘write’ ends in a VOICED

sound in [skr**v**ɪd] (*scribble*); however, in the word *script*, the [b] becomes VOICELESS before the voiceless SUFFIX *-t* giving [skr**v**ɪt].

ASSOCIATIVE (ASC) — the THEMATIC RELATION of an ALIENABLE quality or object predicated of some entity, e.g., *car* in *John has a car* and *John sold his car to Bill*. Often called THEME. Compare ATTRIBUTIVE (ATT).

ASTERISK — (i) In SYNCHRONIC analysis, an asterisk signifies that an expression is ungrammatical, that is, violates a rule or rules in a language, e.g., English speakers do not say **Mary saw I*; rather, they say *Mary saw me*. In the citation of examples, an asterisk placed outside of parentheses indicates that the example is ungrammatical without the element(s) in parentheses, e.g., *I want very much *(for) him to go*. An asterisk placed inside of parentheses indicates that the example is ungrammatical with the element(s) in parentheses, e.g., *I want (*for) him to go*. See GRAMMATICAL versus UNGRAMMATICAL.

(ii) In DIACHRONIC analysis, an asterisk signifies that a sound or word is unattested, that is, without written documentation. See HISTORICAL RECONSTRUCTION.

ATTRIBUTIVE POSITION — the position, usually of ADJECTIVES, when they are PREHEAD MODIFIERS of NOUNS, e.g., *tall* in *a tall man*, as opposed to PREDICATIVE POSITION, when they are POSTHEAD MODIFIERS, e.g., *tall* in *a man that tall* or *The man is tall*.

ATTRIBUTIVE (ATT) — the THEMATIC RELATION of an inalienable quality or object predicated of some entity, e.g., *blue eyes* in *John has blue eyes*. Often called THEME. Compare ASSOCIATIVE (ASC).

AUDITORY PHONETICS — a branch of PHONETICS which deals with the way sounds are perceived by a hearer, in particular, how the human ear responds to sounds and transmits those responses to the brain.

AUGMENTED TRANSITION NETWORK (ATN) — see FINITE STATE GRAMMAR.

AURAL — pertaining to the ear.

AUTONOMOUS — a term meaning ‘self-contained and independent’ and most often associated with GENERATIVE GRAMMAR to describe the HYPOTHESIS that GRAMMAR is a separate FORMAL system distinct from other faculties of the human mind, e.g., visual analysis, musical analysis, etc.

AUXILIARY (AUX) — that part of the structure of a CLAUSE that contains supplementary elements like an AUXILIARY VERB or a NEGATOR, e.g., *can't* in *John can't go*.

AUXILIARY VERB — a set of verbs that are supplementary to the MAIN VERB of a CLAUSE and indicate distinctions in TENSE (*will visit, shall visit, etc.*), MODE (*would visit, could visit, should visit, etc.*), ASPECT (*is visiting, has visited, etc.*) and VOICE (*was visited, etc.*). Also called “helping verb.”

AXIOM [adj: **AXIOMATIC**] — a STATEMENT or PROPOSITION that is widely accepted without proof and used as the basis for other statements or propositions. Some axioms in linguistics include the following: there is an infinite number of sentences in every human language; there is no longest sentence in any human language; and, there is a finite number of rules in the GRAMMAR of every human language.

BABBLING — the utterance of sounds without meaning, referring especially to the sounds made by infants before any meaning is attached to those sounds, e.g., ni ni na nu.

BACK versus **NONBACK** — a PHONETIC FEATURE OPPOSITION. Back sounds are produced by retracting the body of the tongue from the neutral position; nonback sounds are produced without such a retraction. The sounds [u] and [o] are [+BACK]; [i] and [e] are [–BACK].

BACK-FORMATION — a shortened form of a word made by removing a portion of a longer word thought to be an AFFIX. For example, the VERB *swindle* was first used in English around 1780. It was derived from the word *swindler*, already in the language, on the mistaken assumption that the *-er* in *swindler* was the same SUFFIX seen in *singer* (‘one who sings’) and *teacher* (‘one who teaches’). Speakers removed the suffix on ANALOGY with the similar forms to coin the new verb *swindle*.

BALTO-SLAVIC LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes the Baltic languages (Lithuanian and Latvian) and the Slavic languages (Bulgarian, Czech, Polish, Russian, etc.).

BARRED I — the name for the PHONETIC symbol [ɨ].

BEHAVIORISM [adj: **BEHAVIORISTIC**] — a theory in psychology deriving originally from the work of the American psychologist B. F. Skinner. Behaviorists claim that the acquisition of knowledge is the result of mechanisms that are wholly or largely external to the organism. See EMPIRICISM. Compare RATIONALISM.

BENEFACTIVE (BEN) — the THEMATIC RELATION indicating the entity, usually animate, for whose benefit the action or state identified in the PREDICATE occurs, e.g., *for Sue* in *John bought a gift for Sue*.

BILABIAL — formed by the upper and lower lips. The sounds [p], [b], and [m] are bilabial.

BILINGUAL — having two languages.

BINDING THEORY — a theory of REFERENCE, often associated with developments in TRANSFORMATIONAL GRAMMAR that occurred during the late 1970s and early 1980s.

BINDING RESIDENT (BR) — a required X3 level PREHEAD CHARACTERIZER, e.g., a DETERMINER like *the* in *the boy* (cf. **I saw boy*) or a COMPLEMENTIZER like *that* in *He whispered to me that she was having an affair* (cf. **He whispered to me she was having an affair*).

BIOLINGUISTICS — the branch of LINGUISTICS that deals with the biology of language, especially the evolution of NATURAL LANGUAGE, the biological properties of the language apparatus (the VOCAL TRACT, the ear, and the brain), the relationship between human language and animal communication, and similar issues.

BLACK ENGLISH (BE) — a variety of English spoken by African-Americans and characterized by PHONOLOGICAL, SYNTACTIC and SEMANTIC differences from STANDARD AMERICAN ENGLISH (SAE). For example, BE often contains simplification of final CONSONANT clusters such as [t~~e~~] for [t~~e~~t] (*test*) and [d~~e~~] for [d~~e~~k] (*desk*). As a result, the plural of such words is pronounced [t~~e~~z] and [d~~e~~z] following precisely the rules in SAE for the pronunciation of the plural of phonetically similar words like *dress* [dr~~e~~z] and *guess* [g~~e~~z].

BLEND — a term generally referring to a new word formed from the parts of two other words, e.g., *brunch* (from *breakfast* and *lunch*), *motel* (from *motor* and *hotel*), *smog* (from *smoke* and *fog*), etc.

BODY LANGUAGE — the use of facial expressions, gestures, and other movements for the purpose of communication. Also called “paralanguage” and “kinesics.” There are five major categories of body language. *Illustrators* are movements that accompany SPEECH as an illustration, such as the movement an arm in a circular fashion while saying something like *and so on*. *Emblems* are movements that are used as a replacement for speech, such as a wave goodbye or extending the thumb to hitch a ride. *Adaptors* are unconscious movements indicating one’s emotional state, such as nail biting and running fingers through one’s hair. *Affect displays* are facial expressions like smiling, frowning and yawning. *Regulators* are gestures which control the flow of conversation, such as staring, slouching, shuffling papers, etc.

BOOLEAN ALGEBRA — [after George Boole, English mathematician, 1815–1864] — A variety of ALGEBRA dealing with SET relationships stated in terms of the logical operations of CONJUNCTION, DISJUNCTION, and NEGATION.

BORROWED WORD — a word incorporated into one language from another. Some examples of words borrowed into English from other languages are *cul-de-sac* (French), *fiasco* (Italian), *barbecue* (Spanish), *sauerkraut* (German), *shampoo* (Hindi), *moccasin* (Algonquian), *slogan* (Scottish Gaelic), *polka* (Czech), *tycoon* (Japanese), *yogurt* (Turkish), and *alcohol* (Arabic). Also called “loan word.” Compare NATIVE WORD and LEARNED WORD.

BORROWING — the process of incorporating a word or some other linguistic element into one language from another. For example, English words like *snack*, *weekend*, and *jeans* have been incorporated into many of the world’s languages, sometimes even with the English PLURAL SUFFIX, e.g., *flops* and *sports*. Among Italians living in Windsor, Canada, many English words and phrases have been incorporated into Italian like *basimento* (‘basement’) and *cinder blocchi* (‘cinder blocks’);

notice that *basimento* has a Italian NOUN SUFFIX *-o* and *blocchi* has the Italian spelling and PLURAL SUFFIX *-i*.

BOUND MORPHEME — a MORPHEME that cannot occur as an independent word, e.g. *un-* and *-ly* in *unlikely*. Compare FREE MORPHEME.

BOUNDARY SYMBOL — a symbol that indicates the boundaries between structural elements. Generally, a word boundary is indicated by the NUMBER SIGN (#) and a MORPHEME BOUNDARY is indicated by a plus sign (+). For example, the word *unlikely* is represented as [# n+layk+li#].

BRACES — see CURLY BRACKETS.

BROADENING — a widening of the meaning of a word. For example, *holiday* originally meant ‘holy day’; today, it means any day or period when one does not have to work. Compare NARROWING.

BROCA’S APHASIA — [after Paul Broca, French neurologist, 1824–1880] — a predominately expressive disorder of language characterized by an impaired ability to produce spoken language often associated with injury to the inferior portion of the FRONTAL LOBE of the LEFT HEMISPHERE (BROCA’S AREA).

BROCA’S AREA — an inferior portion of the FRONTAL LOBE of the LEFT HEMISPHERE. See Figure Six on Page 26.

C/C++ — a programming language in which a large number of commercial programs such as Microsoft Word, Microsoft Access, and Microsoft Excel are written.

C-COMMAND (CONSTITUENT-COMMAND) — See GOVERNMENT and TREE DIAGRAM.

CALQUE – equivalent to LOAN TRANSLATION.

CARDINAL NUMBER — see NUMERAL.

CASE — an inflectional feature that indicates the relationship of SUBSTANTIVES (nouns, pronouns, etc.) to other words in a SENTENCE. See NOMINATIVE, ACCUSATIVE, GENITIVE, DATIVE, and ABLATIVE.

CASE GRAMMAR — a theory of GRAMMAR proposed in the 1960s by Charles Fillmore. In Case Grammar, THEMATIC RELATIONS are directly represented in DEEP STRUCTURE, and SUBJECT and OBJECT are derived from full PREPOSITIONAL PHRASES. For example, Fillmore proposed that the deep structure of *The janitor will open the door with the key* is (i):

- (i) [S [AUX will] [VP [V open] [PP of the door] [PP by the janitor] [PP with the key]]]

Rules of subject formation and object formation then turn these structures into structures of the more familiar type like (ii).

- (ii) [_S [_{NP} the janitor] [_{AUX} will] [_{VP} [_V open] [_{NP} the door] [_{PP} with the key]]]

CATAPHOR [adj: **CATAPHORIC**] — a PRO-FORM that is bound to a following REFERENT. See REFERENCE.

CATAPHORA — the study of forward REFERENCE.

CATEGORY — a class of elements that share the same FEATURES or characteristics.

CAUSAL (CAU) — the THEMATIC RELATION indicating the entity by which the action or state identified in the PREDICATE is caused, e.g., *out of guilt* in *She acted out of guilt*.

CAUSATIVE VERB — a VERB which expresses causation, such as *liquefy* in *The physicist liquefied the metal*, *darken* in *The tornado darkened the sky for miles*, and *kill* in *The hunters killed the tigers*. See INCHOATIVE VERB.

CEDILLA — the name of the DIACRITIC shaped like a comma and placed under a letter like the French ç used to indicate that the letter is pronounced [s] before [a], [o], and [u], e.g., *garçon* [garsõ] ‘boy.’

CELTIC LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes Welsh, Irish, and Gaulish.

CENTER EMBEDDED CONSTRUCTION — a CONSTRUCTION in which one CONSTITUENT is totally contained inside of another constituent and both constituents are of the same type. The result is an UNACCEPTABLE sentence, one which the human brain finds very difficult to comprehend. For example, sentences like *John passed the opportunity by* and *John looked the contract over* contain the same type of DISCONTINUOUS CONSTITUENT, namely, the PHRASAL VERBS *pass by* and *look over*. If we try to embed one inside the other, we have a center embedded construction which is very hard to understand: *John passed the opportunity to look the contract over by*. However, if we make the phrasal verbs continuous, then the sentence is completely acceptable: *John passed by the opportunity to look over the contract*. Compare MULTIPLE BRANCHING CONSTRUCTION, LEFT BRANCHING CONSTRUCTION, RIGHT BRANCHING CONSTRUCTION, and NESTED CONSTRUCTION.

CENTRAL — a term usually applied to VOWELS articulated by raising the tongue to a position in the center of the oral cavity as opposed to the front or the back as in the articulation of [v] and [ɟ]. Compare MID.

CENTUMLANGUAGES versus **SATEMLANGUAGES** — terms used to describe a split which occurred in the evolution of the INDO-EUROPEAN LANGUAGES in relation to how the PROTO-INDO-EUROPEAN PALATAL, VELAR and LABIOVELAR STOPS developed in each of the various

branches. The centum languages (the western group) include the ITALIC, CELTIC, GERMANIC and HELLENIC branches, while the satem languages (the eastern group) include the INDO-IRANIAN and BALTO-SLAVIC branches plus Albanian and Armenian. Generally, the PROTO-INDO-EUROPEAN palatal and velar stops merged in the centum languages, while the velar and labiovelar stops merged in the satem languages. Specifically, PROTO-INDO-EUROPEAN [k̑], a VOICELESS PALATAL STOP, developed as a SIBILANT in the satem languages, but remained a guttural ([k] or [h]) sound in the centum languages. This is seen in the various COGNATES for the word *hundred* from which the split derives its name: he-katón (Greek), centum [kɛntum] (Latin), hund (Gothic), çatam [ščam] (Sanskrit), satem (Avestan), šimtas (Lithuanian). See Figure Three I on Page 18.

CEREBRAL CORTEX — the surface area of grey matter of the brain consisting of the left and right hemispheres, each containing a FRONTAL, TEMPORAL, OCCIPITAL and PARIETAL LOBE. See Figure Six on Page 26.

CEREBRAL DOMINANCE — the dominance of one hemisphere of the brain over the other in regard to a specific function. For example, in most adult humans, language is under the dominance of the LEFT HEMISPHERE. See CEREBRAL LATERALIZATION.

CEREBRAL LATERALIZATION — At birth, both the left and the right hemispheres of the human brain participate in language processing. During infancy and early childhood, the left hemisphere begins to assume an increasingly dominant role in language processing, so that language is ultimately under the dominant control of the left hemisphere in most humans by the time they reach puberty. This phenomenon is called cerebral lateralization.

CHARACTERIZER (C) — a SYNTACTIC CATEGORY comprising words which have no inherent NUMBER or TENSE, e.g., PREPOSITIONS like *from*, ADJECTIVES like *tall*, ADVERBS like *quickly*, etc.

CHÔMEUR (CHO) — [from the French word meaning ‘unemployed’] — a term used in RELATIONAL GRAMMAR to describe a NOUN PHRASE whose role in a CLAUSE is taken over by some other noun phrase. For example, in a PASSIVE sentence like *The glass was broken by Floyd*, the SUBJECT function of the NOUN PHRASE *Floyd* has been taken over by the NOUN PHRASE *the glass*, and *Floyd* has been demoted to *chômeur*.

CHUNK — an organized unit of information. In GRAMMAR, a chunk is equivalent to a PHRASE.

CIRCUMFLEX/CIRCUMFLEX ACCENT — the name of the DIACRITIC ^ used most often to indicate a change in VOWEL quality or ACCENT in various languages, e.g., â, ê, î, ô, û.

CIRCUMSTANTIAL (CIR) — the THEMATIC RELATION indicating the circumstances under which a predicate occurs, e.g., *with gusto* in *She does everything with gusto*.

CLASSIFIER — a MORPHEME that marks a word, usually a NOUN, as belonging to a specific class, e.g., the suffix *-ess* in English marks various nouns as referring to females such as *adulteress* (*adulterer*), *authoress* (*author*), *duchess* (*duke*), *stewardess* (*steward*), *waitress* (*waiter*), etc.

English has relatively few classifiers, whereas other languages like Chinese and Newari have elaborate classifier systems. In some languages like Swahili, classifiers help to bind words into phrases so that a noun and its MODIFIERS are marked with the same classifier.

CLAUSE — a clause is an expressions that contain a SUBJECT and a PREDICATE. All clauses must contain a VERB. There are two types of clauses: INDEPENDENT and DEPENDENT (SUBORDINATE). A SENTENCE is an INDEPENDENT CLAUSE.

CLICHÉ — an overused and trite expression such as *busy as a bee, packed in like sardines, a ton of work, a necessary evil, bright and early*, etc.

CLITIC — an unstressed word or AFFIX attached to another word. If the attachment is to a preceding word, the clitic is called an “enclitic,” e.g., *not* in *cannot* or the possessive SUFFIX ‘s in *John’s*. If the attachment is to a following word, the clitic is called a “proclitic,” e.g., the INDEFINITIVE ARTICLE *an* in *an apple* ([**ən** + **æpl**]).

CODA — See SYLLABLE.

COGNATE — a cognate is a word in one language that is related historically to a word in another language often with the same or derivative meaning. For example, English *mother*, German *Mutter*, and Latin *mater* are cognates derived from the same ROOT **m-ter* believed to have existed in PROTO-INDO-EUROPEAN. See HISTORICAL RECONSTRUCTION.

COGNITION — various mental processes such as those involved in thinking, knowing, remembering, judging, classifying, analyzing, perceiving, etc.

COGNITIVE GRAMMAR (CG) — a theory of GRAMMAR originally proposed by Ronald Langacker in which all grammatical elements and constructions are viewed as symbolic and describable in terms of their SEMANTIC value. In cognitive grammar, meaning is equated with conceptualization (the formation and use of concepts); language is not viewed as an AUTONOMOUS formal system as it is in GENERATIVE GRAMMAR, but rather as a means of symbolizing the thoughts that speakers have.

COGNITIVE PSYCHOLOGY — a branch of psychology which studies COGNITION.

COGNITIVE SCIENCE — a discipline concerned with the study of the mind and combining research in linguistics, psychology, neurology and ARTIFICIAL INTELLIGENCE.

COHESION [adj: **COHESIVE**] — the relationship between various elements in SENTENCES, DISCOURSE, and TEXTS including the formation of PHRASES like *the old man* out of individual words, the reference of one item to another such as the relationship between *John* and *he* in *John says that he likes spinach*, and, in general, the degree to which the various parts of successive linguistic expressions form a continuous and integrated whole. For example, in isolation a sentence

like *I think vanilla* would probably be considered ungrammatical by most speakers; however, it makes perfect sense as an answer to the question *What kind of ice cream do you think John likes?*

COLLECTIVE NOUN — a NOUN that refers to groups of items, e.g., *herd*, *crowd*, and *mob*.

COMITATIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express the idea *with*. For example, in Estonian, the phrase *kohvikuga* (ROOT *kovik-*) means ‘with the coffee house.’

COMITATIVE (COM) — the THEMATIC RELATION indicating the accompanier, e.g., *with him* in *She came with him*.

COMMA FAULT — see RUN-ON SENTENCE.

COMMA SPLICE — see RUN-ON SENTENCE.

COMMAND — (i) equivalent to IMPERATIVE SENTENCE; (ii) sometimes used to mean C-COMMAND.

COMPARATIVE (CPR) — the THEMATIC RELATION expressing the object of a comparison, e.g., *to Sue* in *Mary is similar to Sue*.

COMPARATIVE ([+CPR]) versus **NONCOMPARATIVE ([-CPR])** — a MORPHOLOGICAL FEATURE OPPOSITION distinguishing MORPHOSYNTACTIC categories which can be compared, such as ADJECTIVE (*big*, *bigger*, *biggest*) and ADVERB (*beautifully*, *more beautifully*, *most beautifully*), from those which cannot be compared, such as DETERMINER and NUMERAL.

COMPARATIVE DEGREE — a degree of MODIFICATION in ADJECTIVES and ADVERBS used when two items are being compared, e.g., *taller* in *John is taller than Bill* and *more precisely* in *John formulated his argument more precisely than Bill*. See POSITIVE DEGREE and SUPERLATIVE DEGREE.

COMPARATIVE GRAMMAR — the comparison of the characteristics of different languages that are unrelated historically such as English and Japanese or that are related historically such as Latin, French, Spanish and Italian.

COMPARATIVE METHOD — a method for examining linguistic forms from two or more languages in order to establish historical relationships and reconstruct the PARENT forms. See HISTORICAL RECONSTRUCTION.

COMPLEMENT — a SYNTACTIC unit that completes the meaning of the HEAD of a PHRASE and usually follows it, e.g., *on his parents* in *John depends on his parents*, *John's dependence on his parents is unhealthy*, and *John is dependent on his parents*.

COMPLEMENTARY ANTONYMS — antonyms that are absolute opposites like *male* and *female*, *dead* and *alive*, *present* and *absent*, etc. The negative of one is a SYNONYM of the other. Thus, if one is not male, one is female; or, if one is not female, one is male. Compare GRADABLE ANTONYMS.

COMPLEMENTARY DISTRIBUTION — in PHONOLOGY, a mutually exclusive distribution of two or more sounds such that none occurs in exactly the same position of a word as any other. For example, in English, NASAL vowels are in complementary distribution to NONNASAL vowels: the former only occur before nasal consonants ([m], [n], and [ŋ]) in words like *can* [kæ̃n]; the latter, only before nonnasal consonants ([p], [b], [f], [r], etc.) in words like *cap* [kæp]. Sounds in complementary distribution are ALLOPHONES of the same PHONEME. Compare OVERLAPPING DISTRIBUTION.

COMPLEMENTATION — the embedding of one CLAUSE into a position normally occupied by the SUBJECT or OBJECT slot of another. SUBJECT COMPLEMENTATION occurs in *That she will go is unlikely*. OBJECT COMPLEMENTATION occurs in *I know that she will go*.

COMPLEMENTIZER (COMP or CPL) — a class of words that introduces an embedded CLAUSE, e.g., a word like *that* in *John knows that Mary will come* or *if* in *John wonders if Mary will come*.

COMPLEX NOUN PHRASE CONSTRAINT — see ROSS' CONSTRAINTS.

COMPLEX SENTENCE — a SENTENCE that contains one or more DEPENDENT CLAUSES, e.g., *I know that she will go* and *He went because she went*.

COMPONENTIAL (CPT) — the THEMATIC RELATION expressing the whole/part relationship. COMPONENTIAL1 (CPT1) indicates the whole and COMPONENTIAL2 (CPT2) indicates the part. See also HOLONYM (=CPT1)/MERONYM (=CPT2).

COMPOSITION — the process of uniting free MORPHEMES, e.g., the morphemes *road* and *way* to form *roadway* or combining *road* and *sign* to form *road sign*.

COMPOSITIONAL (CPS) — the THEMATIC RELATION indicating the material or things out of which something is composed whereby the product retains the original ingredients, e.g., *out of straw* in *She wove the baskets out of straw*. Related to INALIENABLE POSSESSION. Compare ORIGINATIVE, RESULTATIVE, and TERMINATIVE.

COMPOUND — the result of the union of two or more FREE MORPHEMES, e.g., *roadway*, *road sign*, *road sign demolition crew*, etc.

COMPOUND SENTENCE — a SENTENCE that consists of two or more INDEPENDENT CLAUSES and no DEPENDENT CLAUSES, e.g., *John read that book and Bill read it too*.

COMPOUND COMPLEX SENTENCE — a SENTENCE that consists of two or more INDEPENDENT CLAUSES and at least one DEPENDENT CLAUSE, e.g., *John thinks that Sue will win and Bill thinks that Mary will win.*

COMPUTATIONAL LINGUISTICS — the branch of linguistics that uses the techniques and concepts of computer science in the investigation of linguistic problems including the interpretation of SENTENCES (see PARSER), the automatic translation of text from one language to another (*machine translation*), the production of speech (*speech synthesis*), and the statistical analysis of linguistic data or corpora (see CORPUS).

CONCEPTUAL DEPENDENCY THEORY — a theory developed by Roger Schank in the late 1960s which represents the meaning of a SENTENCE in terms of eleven primitive concepts like *PTRANS*, the transfer of the physical location of an object as in *He moved the table out of the room*, and *ATRANS*, the transfer of an abstract relationship such as possession, ownership or control as in *He sold his car to Sue.*

CONCRETE NOUN — a NOUN that refers to tangible objects, e.g., *cow, fence, and girl* as opposed to an ABSTRACT NOUN that refers to intangible things, e.g., *truth, justice, revision, etc.*

CONDITIONAL — in logic, a relationship that holds between two PROPOSITIONS p and q , symbolized as $p \div q$ meaning ‘ p implies q ’ or, equivalently, ‘if p , then q .’ For example, if the proposition p is *John will buy a new car*, then q might be *John can buy a new car*. Logicians distinguish between necessary and sufficient conditions: if p is *John lives in Manhattan* that it necessarily follows that *John lives in New York City*; if however, p is *John lives in New York City*, then the conditions are sufficient for him to live in Manhattan, but he might not since New York City has four other boroughs besides Manhattan. In a necessary condition, if p is true, then q must be true; in a sufficient condition, if p is true, then q might be true but does not have to be true. See ENTAILMENT versus PRESUPPOSITION.

CONDITIONAL MODE/MOOD (CND) — an INFLECTION in VERBS used to express conditions, e.g., *were/was* in *If only he were/was here right now.*

CONDUCTION APHASIA — a type of APHASIA characterized by an impairment in the repetition of speech and in the naming of objects, often associated with a LESION involving the arcuate fasciculus, which is a bundle of nerve fibers that connects BROCA’S AREA, the area in the dominant hemisphere involved in the production of speech, and WERNICKE’S AREA, the area in the dominant hemisphere involved in the comprehension of speech.

CONGENITAL — occurring at birth, e.g., congenital deafness is deafness that exists at birth.

CONGRESSIVE (CGR) — STATIVE or [“DSJ, “CNJ] relations, that is, relations that do not involve causation or motion.

CONJUGATION [adj: **CONJUGATIONAL**] — the INFLECTION of VERBS signifying differences in TENSE, MODE, ASPECT and/or VOICE, e.g., the differences between *play, plays, played, playing*, etc.

CONJUNCTION — (i) a word that connects one GRAMMATICAL CATEGORY or grammatical construction with another, e.g., the word *and* in *John and Mary went together*. See COORDINATING CONJUNCTION and SUBORDINATING CONJUNCTION. (ii) a logical operation involving the union of two expressions. For example, if *p* and *q* are two PROPOSITIONS, the conjunction of *p* and *q* (symbolized as $p \vee q$) is a proposition that is true just in case *p* and *q* are true; otherwise, it is false. The sentence *John will go to an opera and John will go to a play* expresses a conjunction. Compare DISJUNCTION. See PROPOSITIONAL CALCULUS.

CONJUNCTURAL ([+CNJ]) versus **NONCONJUNCTURAL** ([-CNJ]) — a SEMANTIC FEATURE OPPOSITION that distinguishes THEMATIC RELATIONS which emphasize union, association and attachment, such as ALLATIVE (*to New York*) and AFFERENTIAL (*to her*), from those which do not, such as ABLATIVE (*from New York*) and EFFERENTIAL (*from her*). Verbs that have a conjunctural meaning include *advance, enter, insert, give, supply*, etc.

CONNOTATION [adj: **CONNOTATIONAL**] — the meaning of a word that carries some special implication or association, e.g., the word *dog* meaning ‘a worthless, undesirable or unattractive person.’ Compare DENOTATION.

CONSECUTIVE (CNS) — the THEMATIC RELATION that expresses the result or consequences of an action or state, e.g., *for work* in *John is too ill for work*.

CONSONANT (C) [adj: **CONSONANTAL**] — a sound produced with a sustained VOCAL TRACT constriction. See VOWEL and GLIDE. Compare VOCALIC.

CONSONANTAL ([+CON]) versus **NONCONSONANTAL** ([-CON]) — Consonantal sounds are produced with a sustained VOCAL TRACT constriction at least equal to that required to produce FRICATIVES; nonconsonantal sounds are produced without such a constriction.

CONSTATIVE UTTERANCE — see PERFORMATIVE UTTERANCE versus CONSTATIVE UTTERANCE.

CONSTITUENT — any linguistic unit, e.g., any of the elements enclosed in paired brackets in the following:

[[[the] [[[very][old]] [man]]] [[had] [[a] [[wonderful][life]]]]]

In the above example, all of the following are constituents: *the, very, old, man, very old, very old man, the very old man*, etc.

CONSTRUCTION — any particular linguistic expression such as a SENTENCE, a NOUN PHRASE, a COMPLEMENT, etc.

CONTEXT — the setting in which linguistic expressions are used, in particular, how the setting influences meaning. For example, an AMBIGUOUS SENTENCE like *The farmer looked over the fence* will be interpreted as ‘The farmer inspected the fence’ in one setting and as ‘The farmer gazed above the fence’ in another. See COHESION and STYLISTICS.

CONTEXT FREE versus **CONTEXT SENSITIVE** — context free means independent of context, e.g., unstressed VOWELS in English reduce to [ə] regardless of what comes before or after them. Context sensitive means dependent on context, e.g., English VERBS whose last SYLLABLE is followed by two or more CONSONANTS are STRESSED on that last syllable ([dipárt] *depart*).

CONTEXT SENSITIVE — see CONTEXT FREE.

CONTINUANT ([+CONT]) versus **NONCONTINUANT** ([–CONT]) — a PHONETIC FEATURE OPPOSITION. In the production of continuant sounds, the primary constriction in the VOCAL TRACT is not narrowed to the point where the air flow past the constriction is blocked; in stops the air flow through the mouth is effectively blocked. A noncontinuant sound is commonly referred to as a “stop.”

CONTINUITY THEORY versus **DISCONTINUITY THEORY** — a continuity theory of the evolution of human language assumes a straight line development of language from primitive forms of communication found elsewhere in the animal kingdom. A discontinuity theory assumes that language is species specific to humans with no antecedents found elsewhere in the animal world.

CONTROL THEORY — see PRO.

CONVERSATIONAL IMPLICATURE — something that is implied during a conversation. For example, if Speaker X says *I am going to marry a princess* and Speaker Y responds with *I am going to be the next president of the United States*, then, under ordinary circumstances, Speaker Y’s response would be understood to mean that he or she thinks it is unlikely that Speaker X will marry a princess. However, if Speaker X is a prince and Speaker Y is the current vice president of the United States, then Speaker Y’s response carries no such implicature for that interchange.

CONVERSATIONAL MAXIMS — see GRICE’S MAXIMS.

COORDINATE STRUCTURE CONSTRAINT — see ROSS’ CONSTRAINTS.

COORDINATING CONJUNCTION — a CONJUNCTION that joins elements in such a way as to indicate approximately equal order or rank amongst the elements, e.g., *and* in *John and Harry both went*, or in *The book is either on the table or on the desk*, and *but* in *He will go but he won’t stay long*.

COPULA — a COPULATIVE VERB.

COPULATIVE VERB — a VERB that links the SUBJECT with a NOMINAL or ADJECTIVAL COMPLEMENT, e.g., *appear* in *John appears healthy*, and *be* in *John was the captain of the team*. Also called “copula.” Compare TRANSITIVE VERB and INTRANSITIVE VERB.

COREFERENTIAL — having the same REFERENT, e.g., in *John said that he would go*, the words *John* and *he* can refer to the same individual, in which case they are coreferential, or to two different individuals, in which case they are not.

CORE GRAMMAR — the entire set of LINGUISTIC UNIVERSALS. Also called “universal grammar.”

CORONAL ([+COR]) versus **NONCORONAL** ([-COR]) — a PHONETIC FEATURE OPPOSITION. Coronal sounds are produced with the blade of the tongue (the portion immediately behind the tip) raised from its neutral position; noncoronal sounds are produced with some other articulator than the blade of the tongue.

CORPUS (plural **CORPORA**) — a corpus is any collection of linguistic data in any language or group of languages, e.g., all the works of Shakespeare form a corpus for the analysis of Shakespearean English. Nowadays, various corpora are available for use on computers serving as a research tool for the rapid determination of linguistic questions such as how frequently a given word or grammatical form occurs, in what context it is found, when it was first used, and so on.

CORPUS CALLOSUM — a bundles of nerve fibers that connects the RIGHT HEMISPHERE and the LEFT HEMISPHERE of the CEREBRAL CORTEX.

COUNT NOUN — a NOUN that is numerable, e.g., *tree*, *leg*, and *linguist*. Compare MASS NOUN.

CREATIVITY — a term used mainly in the study of LANGUAGE ACQUISITION and language use to refer to the ability of speakers to invent new words and expressions that they have not heard before, e.g., the creation of *ketchuped* in *These French fries are too ketchuped up to eat*. or *two-footed* in *The figure skater two-footed the landing of her double axle*.

CREOLE — a creole is a PIDGIN language which is the NATIVE LANGUAGE for a group of speakers. For example, Haitian Creole, which is based on French, is the first language learned by many children in Haiti. Generally, a creole has a much larger vocabulary and GRAMMAR than a pidgin and is comparable in complexity to an ordinary language like French.

CRITICAL LITERACY — the psycholinguistic process of getting meaning from print and putting meaning into print, used for the purposes of analysis, synthesis and evaluation; these processes develop through formal schooling and beyond it, at home and at work, in childhood and across the lifespan.

CRITICAL PERIOD — a genetically determined window of time during which an animal can acquire a particular ability. In some instances, if the animal does not acquire the ability during that time, then it never will or will do so only with great difficulty. For example, if a zebra finch is not exposed to the song of its species between 25 to 50 days after hatching, then it will fail to acquire the song throughout its life. In humans, it is believed that there is a critical period for NATIVE LANGUAGE ACQUISITION which extends to puberty, though the exact window of opportunity is controversial.

CRITICAL THINKING — an approach to problem solving which is based on objective methods, that is, methods that deal with facts independent of one's feelings about those facts. An objective approach to the study of language attempts to describe language without reference to the prejudices, beliefs, or opinions one might have about it. With any given set of data, HYPOTHESES are formulated, tested, and then adopted, revised or discarded only on the basis of how well they account for and explain the data.

CROSS-CULTURAL LINGUISTICS — a branch of linguistics concerned with the study of communication between people with different cultural backgrounds, especially the different ways in which words, phrases, and sentences with essentially the same SEMANTIC content are interpreted by people from different cultures speaking different languages. For example, in America, it would be considered rude to comment on how fat someone has become, whereas the same comment would be considered a compliment in a culture where gaining weight is a sign of prosperity such as in the Philippines. Different cultures have different conventions for politeness and propriety, different ways of categorizing objects in the world, different meanings for the same gestures, and different customs for social interaction. Cross-cultural studies investigate the impact these differences have on interpersonal and international relations. See PROXEMICS.

CUE — a SYNTACTIC CATEGORY that serves to alert speakers to upcoming structure. In English, a cue is any X3 LEVEL PREHEAD CHARACTERIZER that is a HEAD-ONLY PHRASE ([C3 [C0 head]]); thus, a cue must occupy a fixed RESIDENCE and have the simplest possible structure. The most common cues in English are DETERMINERS and COMPLEMENTIZERS. The presence of cues facilitates sentence comprehension: *The editors read the story were in tears* is more difficult to comprehend than *The editors that read the story were in tears*. See GARDEN PATH SENTENCE.

CUNEIFORM — a method of WRITING that consists of making imprints of wedges on a soft clay tablet with a stylus such as that used in ancient Mesopotamia by the Sumerians over 5000 years ago.

CURLY BRACKETS — symbols used in PHRASE STRUCTURE RULES to indicate ALTERNATIVE ELEMENTS. For example, the following rule says that TENSE can be either PRESENT, PAST, or FUTURE: TENSE ÷ {PRESENT, PAST, FUTURE} Also called “braces.”

DACTYL [adj: **DACTYLIC**] — a metrical FOOT consisting of one long or stressed SYLLABLE followed by two short or unstressed syllables (– ˘ ˘), e.g., the syllabic structure of the words *broccoli*, *symphony*, and *ivory*

DACTYLIC HEXAMETER — a verse that has six metrical feet typically consisting of five DACTYLS (one long or STRESSED SYLLABLE followed by two short or unstressed syllables) followed by either a TROCHEE (one long or stressed syllable followed by one short or unstressed syllable) or SPONDEE (two long or stressed syllables) as in *This is the forest primeval, the murmuring woods and the hemlocks* (— ‘ ‘ — ‘ ‘ — ‘ ‘ — ‘ ‘ — ‘ ‘ — —).

DATA — factual information and examples used as the basis for a discussion, analysis, or HYPOTHESIS.

DATABASE — a large collection of facts often stored in a computer so that any individual fact can be found and retrieved rapidly. See SEMANTIC NETWORK.

DATIVE (DAT) — the THEMATIC RELATION indicating the animate being affected by the state or action identified in the VERB, e.g., *to him* in *She is mean to him*. Also called “experiencer.” See AFFECTIVE (AFC).

DATIVE CASE (DAT) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the INDIRECT OBJECT of a VERB or the AFFECTIVE (AFC) THEMATIC RELATION. For example, in the Latin sentences *Publius librum Marco dabit* ‘Publius gave the book to Marcus’ and *Liber Marco placet* ‘The book is pleasing to Marcus,’ the word *Marco* is in the dative case.

DAUGHTER versus **PARENT** — (i) in SYNCHRONIC analysis, any subordinate NODE in A TREE DIAGRAM is a daughter of the parent node which dominates it, e.g., N is a daughter of the parent NP since N is derived from NP; or (ii) in DIACHRONIC analysis, a descendant language is a daughter language of an older parent language, e.g., French and Italian are daughter languages (descendants) of the parent language LATIN.

DECIBEL — see AMPLITUDE.

DECLARATIVE SENTENCE — a SENTENCE that makes a statement, e.g., *John wrote Helen a letter*.

DECLENSION [adj: **DECLENSIONAL**] — the INFLECTION of SUBSTANTIVES particular in regard to CASE. For example, in Latin, SUBSTANTIVES are inflected for five cases: *pater* (NOMINATIVE, used for the SUBJECT), *patriis* (GENITIVE, used for the POSSESSOR), *patri* (DATIVE, used for the INDIRECT OBJECT), *patrem* (ACCUSATIVE, used for the DIRECT OBJECT), and *patre* (ABLATIVE, used for the SOURCE).

DEDUCTION [adj: **DEDUCTIVE**] — a type of reasoning that begins with assumptions or general truths that we know or believe to be true and uses them to arrive at particular conclusions. For example, if we know that all cats meow, we deduce that Binkie, a cat we do not know, will meow. Compare INDUCTION.

DEEP STRUCTURE — a term used in the STANDARD THEORY of TRANSFORMATIONAL GRAMMAR (TG) for the abstract syntactic representation of a SENTENCE generated by PHRASE STRUCTURE RULES. For example, the sentences *The censors will probably ban that movie* and *That movie, the censors will probably ban* have the same deep structure in which the phrase *that movie* is the DIRECT OBJECT of the verb *ban*. The two sentences are related by the TRANSFORMATIONAL RULE of TOPICALIZATION which optionally moves the phrase *that movie* from its deep structure position (as the direct object) to sentence initial position generating the SURFACE STRUCTURE *That movie, the censors will probably ban*.

DEFINITE ARTICLE/DETERMINER — an ARTICLE/DETERMINER that is specific in reference, e.g., *the, this, that, these, those*, etc.

DEGREE WORD (DGR) — a class of words used to express gradations, e.g., *too* in *He is too short to be a basketball player*.

DEICTIC — a SEMANTIC FEATURE relating to DEIXIS.

DEIXIS [adj: **DEICTIC**] — the direct reference of words to specific people, objects, locations or times as in the use of *I* and *you*, *this* and *that*, *here* and *there*, *now* and *then*, etc.

DELETION — a term used in TRANSFORMATIONAL GRAMMAR (TG) for the removal of a syntactic unit, e.g., the removal of *cleans house* in the second clause of *Mary cleans house on Saturdays, and Sue, on Sundays*. Compare OMISSION.

DELIMITIVE (DEL) — the THEMATIC RELATION that expresses the conditions from or under which the action occurs, e.g., the PHRASES *in bad weather* and *if the weather is bad* in *You should not go sailing in bad weather/if the weather is bad*.

DEMONSTRATIVE PRONOUN — a PRONOUN used to designate particular persons or things, e.g., *that* in *I like that*.

DENOTATION [adj: **DENOTATIONAL**] — the specific, exact meaning of a word, excluding its extended uses and emotional colorations, e.g., the word *dog* meaning ‘a canine domestic mammal’ as opposed to the same word meaning ‘a worthless, undesirable or unattractive person.’ Compare CONNOTATION.

DEPENDENT CLAUSE — a CLAUSE that fulfills a particular GRAMMATICAL RELATION like SUBJECT (*That is won is terrific*), OBJECT (*I know that he won*), MODIFIER (*He is happy because he won*), etc. Dependent clauses are usually introduced by a COMPLEMENTIZER like *that* or a SUBORDINATING CONJUNCTION like *because*.

DERIVATION [adjectival: **DERIVATIONAL**] — (i) the process whereby various roots and affixes are combined to form words, e.g., the combination of *un-*, *like*, and *-ly* to form *unlike*, *likely*, and *unlikely*; (ii) in phonology, the sequence of steps and rules involved in the change of a

PHONEMIC REPRESENTATION to a PHONETIC REPRESENTATION; (iii) in TRANSFORMATIONAL GRAMMAR, the sequence of steps and rules involved in the generation of a sentence from DEEP STRUCTURE to SURFACE STRUCTURE. See STANDARD THEORY.

DERIVATIVE — a form of a ROOT or word produced by the addition of various AFFIXES. For example, the word *employ* has the derivatives *employs, employed, employing, employer, employers, employee, employees, employment, employable, employability, unemployed, unemployment, unemployable, unemployability, etc.*

DESCRIPTIVE ADEQUACY — the level of adequacy attained in GRAMMATICAL CHARACTERIZATION when facts are described with generalized PRINCIPLES or rules. See LEVELS OF ADEQUACY.

DESCRIPTIVE GRAMMAR — GRAMMAR that characterizes what people say as opposed to how they should speak. Compare PRESCRIPTIVE GRAMMAR.

DETERMINER (DET) — a class of words which functions as a SPECIFIER of a NOUN, e.g., *this* in *this book*. Sometimes called “article.”

DIACHRONIC — occurring through time. Diachronic linguistics is the study of the development of language through time. Same as HISTORICAL LINGUISTICS. Opposed to SYNCHRONIC.

DIACRITIC — a mark placed over, through, after, before or under a letter to represent a variation in phonetic value, e.g., *., ã, ‘, è, » O, k^h, œ, ç, ħ, etc.*

DIAERESIS — a DIACRITIC consisting of two dots placed above a vowel to indicate that it is pronounced as a separate syllable as in *naïve*.

DIALECT [adj: **DIALECTAL**] — an inexact term that refers to a systematic variation in a language which generally does not impair intelligibility. For example, American English and British English are dialects of English; for the most part, speakers of either can understand speakers of the other. Sometimes dialects are not mutually intelligible. For example, Mandarin and Cantonese are generally considered dialects of Chinese mainly because they have the same writing system and are spoken in the same country; however, speakers of one cannot generally understand speakers of the other. The reverse also occurs: speakers of Scandinavian languages (Danish, Swedish, and Norwegian) are generally able to understand each other quite well; however, because of the difference in geography, culture, and politics, one speaks of Scandinavian languages, not dialects. See STANDARD DIALECT and BLACK ENGLISH.

DIALECTOLOGY — the study of DIALECTS.

DIFFERENTIAL (DIF) — the THEMATIC RELATION expressing the degree of difference, e.g., *by a mile* in *He won by a mile*.

DIMENSIONAL ([+DIM]) versus **NONDIMENSIONAL** ([−DIM]) — a SEMANTIC FEATURE OPPOSITION that distinguishes THEMATIC RELATIONS which focus on measurement from those which do not. For example, dimensional uses of ABLATIVE and ALLATIVE occurs in *It grows from* (ABLATIVE) *about four to* (ALLATIVE) *about six inches per year*. Nondimensional uses of ABLATIVE and ALLATIVE occur in *He ran from* (ABLATIVE) *the house to* (ALLATIVE) *the shed*. Other examples of dimensional expressions are *It costs from five to ten dollars*, *It lasts from ten to fifteen minutes*, *It weighs from five to six pounds*, etc.

DIPHTHONG — a sound sequence consisting of a VOWEL followed by a GLIDE as in [siy] (*see* and *sea*), [sey] (*say*), [suw] (*sue* and *Sue*), [sow] (*sew* and *so*), [say] (*sigh*), [saw] (*sow* ‘adult female swine’), [sɔ̃y] (*soy*), etc.

DIRECT OBJECT — a NOUN PHRASE which generally functions as the person or thing directly affected by the action described in the VERB, e.g., the noun phrase *the boy* in *The girl hit the boy*. More properly, it is the noun phrase which is marked with the ACCUSATIVE CASE (*me*, *her*, *him*, *them*, etc.) as opposed to the NOMINATIVE CASE (*I*, *she*, *he*, *they*, etc.) when it is replaced by a PRONOUN. Compare *The girl hit/saw/resembles the boy* and *She hit/saw/resembles him*.

DISCONTINUITY THEORY — see CONTINUITY THEORY.

DISCONTINUOUS CONSTITUENT – a CONSTITUENT whose parts are not adjacent, e.g., the PHRASAL VERB *throw out* is discontinuous in *John threw the garbage out*.

DISCOURSE — the name given to linguistic units larger than a SENTENCE including paragraphs, conversations, dialogues, speeches, and so on. Spoken discourse refers to such units in SPEECH; written discourse refers to such units in WRITING.

DISCOURSE ANALYSIS — the analysis of DISCOURSE, including especially the relationship between linguistic expressions and the CONTEXT in which they occur, the choice of particular expressions in particular situations, the transitions that occur from one sentence to the next, taking turns, the introduction of new information not previously mentioned, and so on.

DISJUNCTION — a logical operation involving the alternation of two expressions. For example, if *p* and *q* are two PROPOSITIONS, the disjunction of *p* and *q* (symbolized as $p \vee q$) is true whenever *p* is true or *q* is true or both *p* and *q* are true; otherwise it is false. The sentence *John will go to an opera or John will go to a play* expresses a disjunction. Compare CONJUNCTION. See PROPOSITIONAL CALCULUS.

DISJUNCTURAL ([+DSJ]) versus **NONDISJUNCTURAL** ([−DSJ]) — a SEMANTIC FEATURE OPPOSITION that distinguishes THEMATIC RELATIONS which emphasize separation, detachment and withdrawal, such as ABLATIVE (*from New York*) and EFFERENTIAL (*from her*), from those which do not, such as ALLATIVE (*to New York*) and AFFERENTIAL (*to her*). VERBS that have a disjunctural meaning include *withdraw*, *exit*, *extract*, *take*, *deplete*, etc.

DISLOCATION — see RESUMPTIVE PRONOUN.

DISTINCTIVE FEATURE — a term used primarily in PHONOLOGY to denote a FEATURE that serves to distinguish words in a given language, e.g., the feature [±NASAL] which distinguishes [b~~v~~] (*bit*) from [m~~v~~] (*mitt*), [r~~e~~] (*red*) from [r~~e~~] (*wren*), etc.

DITRANSITIVE VERB — a VERB that can take two OBJECTS, e.g., *give* in *I gave him a book*. Compare TRANSITIVE VERB and INTRANSITIVE VERB.

DOMINANCE — a FORMAL HIERARCHICAL relationship between syntactic units in PHRASE STRUCTURE. A phrase " is said to dominate a phrase \$ if \$ is totally contained in ". See TREE DIAGRAM.

DUAL — a distinction in number used for two things, as opposed to one or more than two. See NUMBER.

DYSGRAPHIA [adj: **DYSGRAPHIC**] — impairment of the ability to write generally as a result of injury to the brain.

DYSLEXIA [adj: **DYSLEXIC**] — impairment of the ability to read generally as a result of injury to the brain.

DYSPHASIA [adj: **DYSPHASIC**] — impairment of the ability to use and/or language generally as a result of injury to the brain.

ECOLALIA — the tendency to repeat things one has heard – a normal occurrence among children during the early stages of NATIVE LANGUAGE ACQUISITION as well as an abnormal condition associated with APHASIA.

EFFECTIVE (EFC) — the THEMATIC RELATION indicating the ANIMATE being or force typically perceived as bringing about the action identified in the PREDICATE, e.g., *Bill* in *Bill killed the bug* and *the tornado* in *The tornado destroyed the crops*. Compare AFFECTIVE (AFC).

EFFERENTIAL (EFR) — the THEMATIC RELATION indicating the quasi-positional entity from which an action is directed, e.g., *John* in *John sold the car to Bill* and *Bill bought the car from John*. Compare AFFERENTIAL (AFR).

ELATIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express motion out of. For example, in Estonian, the phrase *kohvikust* (ROOT *kovik-*) means ‘out of the coffee house.’

ELATIVE (ELA) — the positional THEMATIC RELATION expressing motion out of, e.g., *He got off the horse* and *He jumped out of the pool*. Compare ILLATIVE.

ELLIPSIS [adj: **ELLIPTICAL**] — the omission of an item to be understood by specific rules as opposed to reference to a PHRASE mentioned elsewhere in a SENTENCE. For example, English has a variety of body-part verbs whose DIRECT OBJECT is generally omitted and understood as the part affected by the verb, e.g., *She nodded (her head)*, *He shrugged (his shoulders)*, *They blinked (their eyes)*, etc. Elliptical items are often represented by the empty category [u]. See EMPTY CATEGORY.

EMBEDDED — a syntactic unit is embedded in a superordinate unit if it is contained inside the superordinate unit. For example, the sentence *John left* is embedded as the DIRECT OBJECT of the VERB *think* in *I think (that) John left*. It is embedded as the SUBJECT of *seem* in *That John left seems to have upset Sue*.

EMBLEMS — see BODY LANGUAGE.

EMPHATIC — a word that expresses emphasis, e.g., the forms of *do* in *He did go* or *She does like bagels*.

EMPHATIC PRONOUN — equivalent to INTENSIVE PRONOUN.

EMPIRICAL — based on and verifiable by observation or experience. LINGUISTICS is an empirical science in that the data being analyzed (SENTENCES, PHRASES, etc.) actually occur. HYPOTHESES about the nature and structure of linguistic phenomena can be directly verified in the speech of native speakers and in their judgements regarding the interpretation of those phenomena.

EMPIRICISM — an approach to knowledge acquisition deriving from the work of philosophers John Locke (1632–1704), George Berkeley (1685–1753), and David Hume (1711–1776). The empiricist approach claims that humans are born with very little in the way of instinctive behavior, that is, very little in the way of INNATE mechanisms for acquiring knowledge about language or anything else. Most of what humans come to know is a product of their experiences with the physical and social world. Humans learn by imitating, by associating, by generalizing, and so on. Also referred to as BEHAVIORISM and NURTURISM. Compare RATIONALISM.

EMPTY CATEGORY — any PHONOLOGICALLY null CATEGORY, that is, a category without phonetic content. Empty categories include [e] in *John will sing if you ask him to [e]*, where the meaning of [e] (= *sing*) is supplied under identity with a PHRASE elsewhere in the SENTENCE; and [u] in *John shrugged [u]*, where the meaning of [u] (= *his shoulders*) is not supplied under identity with a phrase elsewhere in the sentence.

ENCLITIC — see CLITIC.

ENDOCENTRIC versus **EXOCENTRIC** — terms used in grammatical analysis to describe the function of a PHRASE in relation to the HEAD of the phrase. An endocentric construction is one where the phrase as a whole has the same function as the HEAD of the PHRASES, e.g., in English, NOUN PHRASES are endocentric since an NP, no matter how long or internally complex, has the function of a NOUN, e.g., it can serve as the SUBJECT or OBJECT of a VERB. An NP can consist only

of a PROPER NOUN like *John* in *John left* or of a whole string of words like *the man with the beard* in *The man with the beard left*. An exocentric construction is one in which the phrase as a whole has a different function from its parts, including its head. A PREPOSITIONAL PHRASE like *with a beard* is exocentric in *the man with the beard* since the entire phrase functions like an adjective but does not contain any adjectives (cf. *the bearded man*). See FUNCTIONAL CATEGORY.

ENERGY SINK — see ACTION CHAIN.

ENERGY SOURCE — see ACTION CHAIN.

ENTAILMENT versus **PRESUPPOSITION** — two terms that involve the relationship between antecedent (prior) and consequent (resulting) PROPOSITIONS. In entailment, if the antecedent proposition *p* is true, then the consequent proposition *q* is true; if the antecedent proposition *p* is false, then the consequent proposition *q* is false. For example, the proposition *John is married* ('It is true that John is married') entails that *John has a wife* ('It is true that John has a wife'); the proposition *John is not married* ('It is false that John is married' or, equivalently, 'It is true that John is not married') entails that *John does not have a wife* ('It is false that John has a wife' or, equivalently, 'It is true that John does not have a wife'). In presupposition, whether an antecedent proposition *p* is true or false, the consequent proposition *q* is always true. For example, the propositions *John wants to get married* ('It is true that John wants to get married') and *John doesn't want to get married* ('It is false that John wants to get married') both presuppose the proposition *John is not married*.

ENVIRONMENT OF CHARACTERIZER HEAD ([±ECH]) — a HEAD FEATURE opposition distinguishing elements which can occur inside of CHARACTERIZER PHRASES ([+ECH]), such as INTENSIFYING ADVERBS (*extremely* in *extremely tall*), from elements which cannot ([−ECH]), such as QUANTIFIERS (*double* in **He is double tall*).

ENVIRONMENT OF NOUN HEAD ([±ENH]) — a HEAD FEATURE opposition distinguishing elements which can occur inside of NOUN PHRASES ([+ENH]), such as DETERMINERS (*those* and *clever* in *those clever students*), from elements which cannot occur inside of noun phrases ([−ENH]), such as MANNER ADVERBS (**those cleverly students*).

ENVIRONMENT OF VERB HEAD ([±EVH]) — a HEAD FEATURE opposition distinguishing elements which can occur inside of VERB PHRASES ([+EVH]), such as MANNER ADVERBS (*willingly* in *She willingly agreed*), from elements which cannot occur inside of verb phrases ([−EVH]), such as DETERMINERS (**the agree*).

EPENTHESIS [adj: **EPENTHETIC**] — the insertion of a sound or sounds into the middle of a word as in the translation of the German word *Landsknecht* [lantsknɛt] (2 syllables) 'mercenary' into Italian as *lanzicheneco* [landzikinɛko] (5 syllables). Compare PROTHESIS and METATHESIS.

EPILOGUE — that part of the structure of a speech which contains a summary and conclusion. Compare EXORDIUM and ARGUMENT.

EPITHET — a describing word or PHRASE that occurs along with, and usually after, a NOUN PHRASE and stands in APPPOSITION to it, e.g., *Richard, the lion-hearted*.

EQUATION — see ALGEBRA.

ESSIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express a temporary state. For example, in Estonian, the phrase *kohvikuna* (ROOT *kovik-*) means ‘as a coffee house’ (They used the building as a coffee house).

ERGATIVE CASE (ERG) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) in languages like Eskimo and Newari generally used to indicate the SUBJECT of a TRANSITIVE VERB. Compare ABSOLUTIVE CASE.

ETH or **EDH** — the character “ð” (for the sound of *th* in *bathe*) used often in reference to the PHONOLOGY of Old English and distinguished from *thorn*, the character “þ” (for the sound of *th* in *bath*).

ETYMOLOGY [adj: **ETYMOLOGICAL**] — the study of the origin and history of words.

EUPHEMISM [adj: **EUPHEMISTIC**] — an agreeable or inoffensive expression substituted for one considered objectionable for various social reasons, e.g., the use of, *loved one* for *corpse*, *full-figured woman* for *fat lady*, etc.

EXCLAMATORY SENTENCE — a SENTENCE that expresses strong or sudden feeling, e.g., *What a beautiful letter John wrote Helen!*

EXHAUSTIVE NATURAL CLASS — a NATURAL CLASS that includes all members for a given language, e.g., the vowels, [i], [ɪ], [ʊ], and [] form an exhaustive natural class of all the [+HIGH] VOWELS in English.

EXISTENTIAL QUANTIFIER — see QUANTIFICATION.

EXNER’S CENTER [from Siegmund Exner, German neurologist, 1846–1926] — the portion of the FRONTAL LOBE of the CEREBRAL CORTEX concerned with the movement of the hand, especially in writing. See Figure Six on Page 26.

EXOCENTRIC — See ENDOCENTRIC.

EXORDIUM — that part of the structure of a speech in which the situation or topic is described. Compare ARGUMENT and EXORDIUM.

EXPEDIENTIAL (EXP) — the THEMATIC RELATION expressing the means by which something is done, e.g., *by car* in *He went by car*.

EXPERIENCER — see DATIVE.

EXPLANATORY ADEQUACY — the highest level of adequacy attained in GRAMMATICAL CHARACTERIZATION when all principles are related to the nature of the language apparatus of human beings. See LEVELS OF ADEQUACY.

EXPLETIVE — a word that anticipates a following PHRASE in a SENTENCE, e.g., *there* in *There is a unicorn in the garden* and *it* in *It is odd that John left*.

EXPLICIT PERFORMATIVE — see PERFORMATIVE UTTERANCE versus CONSTATIVE UTTERANCE.

EXTENSIONAL ([+EXT]) versus **NONEXTENSIONAL ([−EXT])** — a SEMANTIC FEATURE OPPOSITION distinguishing POSITIONAL THEMATIC RELATIONS that emphasize an expanse of space or time, such as a LOCATIVE phrase like *all over the lawn* ([+EXT]), from those that emphasize a small and highly circumscribed space or time, such as a LOCATIVE phrase like *on the horse* ([−EXT]). Words with an extensional meaning include *disperse, gather, migrate, spread*, etc. In NONPOSITIONAL RELATIONS, [+EXT] is used metaphorically to distinguish those THEMATIC RELATIONS which are used primarily as MODIFIERS ([+EXT]), such as CIRCUMSTANTIAL and PURPOSIVE, from those that are used primarily as SUBJECTS and OBJECTS ([−EXT]), such as EFFECTIVE and AFFECTIVE.

FACTIVE versus **NONFACTIVE** — a factive PREDICATE is one which carries the presupposition that a CLAUSE serving as its DIRECT OBJECT or SUBJECT expresses a fact, e.g., the verb *know* in *I know that John won* or the adjective *odd* in *It is odd that John won*. Both predicates presuppose that John, in fact, won (cf. **It is odd that John won, but he didn't*). A nonfactive predicate does not carry such a presupposition, e.g., the verb *think* in *I think that John won* or the adjective *possible* in *It is possible that John won*. Neither of these examples presupposes that John won (cf. *It is possible that John won, but unlikely that he did*).

FEATURE — a particular aspect of any GRAMMATICAL CATEGORY often expressed as a binary opposition between + and −. For example, in PHONETICS and PHONOLOGY, the sounds [m], [n], [ɱ], and [ŋ] form the category of sounds articulated by lowering the VELUM so that the airflow passes through the NASAL CAVITY rather than the ORAL CAVITY. This category of sounds is therefore called nasals, and the members of the category each have the DISTINCTIVE FEATURE [+NASAL]; all other sounds, in which the airflow passes through the oral cavity, are [−NASAL]. In a similar way, THEMATIC RELATIONS fall into two major categories: those that refer to location in space and time, which have the feature [+POSITIONAL]; and those which do not refer to location, [−POSITIONAL].

FEATURE OPPOSITION — see FEATURE.

FEATURE SPECIFICATION — the description in terms of FEATURES of any GRAMMATICAL FORM or CATEGORY, e.g., the description of the VOWEL [i] as [−CONSONANTAL, +VOCALIC, +HIGH, −BACK, +TENSE].

FEMININE (FEM) — see GENDER.

FIGURE versus **GROUND** — terms used in psychology and COGNITIVE GRAMMAR to describe the elements in any perceptual experience, most often in reference to something seen. A figure is some entity, usually an object, that stands out in a perceived image, while a ground is the entire space around that object. For example, a performer taking a bow at the end of a performance would be a figure on the stage, while the entire area surrounding the performer would be the ground.

FIGURE OF SPEECH — an expression meant to be understood in its nonliteral sense for rhetorical effect to create a particular image or vivid picture, e.g., saying *The battlefield was bathed in a river of blood*. See ANTITHESIS, APOSTROPHE, HYPERBOLE, LITOTES, METAPHOR, METONYMY, PERSONIFICATION, SIMILE, and SYNECDOCHE.

FINGER SPELLING — see SIGN LANGUAGE.

FINITE STATE GRAMMAR — a GRAMMATICAL model in ARTIFICIAL INTELLIGENCE that views the production of a SENTENCE as the passage from an initial state (the first word) through a finite number of intermediate states (each successive word) to the final state (the last word). At each state, the number of transitions through successive states is limited by the particular language being described. For example, if the language is English and the first state contains the word *the*, then next state cannot be another determiner, since English does not allow two successive determiners (**the this man*), but might be an adjective such as *tall*. In *Syntactic Structures* (Mouton, 1957), Chomsky argues that grammars of NATURAL LANGUAGE are not finite state grammars because they contain DISCONTINUOUS CONSTITUENTS like *if...then* in *If John wins (the lottery), then he will be able to buy a new car*. A finite state grammar is also called a “transition network.” When the network allows states to be repeated RECURSIVELY as is necessary in phrases like *a very, very tall man* or *a sleek, green, speedy Masarati*, then it is called a “recursive transition network (rtn).” When the network contains additional conditions, possibilities or actions for moving from one state to another, it is called an “augmented transition network (atn).”

FINITE VERB versus **NONFINITE VERB** — a VERB form that has a TENSE, e.g., the verb *went* in *John went there* and the verb *is* in *John is going there*. The verb form *going* in *John is going there* is nonfinite because it does not have a tense (cf. **John going there*).

FIRST ORDER ([+FST]) versus **NONFIRST ORDER ([–FST])** — a SEMANTIC FEATURE OPPOSITION distinguishing POSITIONAL THEMATIC RELATIONS that make reference to a point, line or surface, such as a LOCATIVE phrase like *on the wall* ([+FST]), from those that make reference to an area or volume, such as a LOCATIVE phrase like *in the building* ([–FST]). Words with a first order meaning include *plate, slap, speckle, strip, touch*, etc. In NONPOSITIONAL RELATIONS, [+FST] is used metaphorically to refer to the end points in any transfer of possession (the SOURCE and the GOAL) as opposed to the object possessed, that is, the thing that “moves” from the SOURCE to the GOAL as in *John sold the car to Mary* and *Mary bought the car from John*.

FIRST PERSON — see PERSON.

FISSURE — see GYRUS.

FLAP — a sound produced with a quick flick of the tongue against the alveolar ridge as in the articulation of [D] in [w]Dɔ̃] (*water*).

FLOATING QUANTIFIER — a QUANTIFIER that can “float” rightward in a SENTENCE to various positions, e.g., *all* in *All the men could have gone fishing*, *The men all could have gone fishing*, *The men could all have gone fishing*, and *The men could have all gone fishing*.

FOOT — a unit of METER consisting of a specific set of stressed or long SYLLABLES followed by unstressed or short syllables. See ANAPEST, DACTYL, IAMB, SPONDEE, and TROCHEE.

FORMAL — following a FORMALISM.

FORMAL versus **INFORMAL LANGUAGE** — formal language is characterized by careful choices in the use of words and grammar and consideration of the appropriateness of different expressions in different CONTEXTS such as a courtroom, a ceremony, a speech, etc. Informal language lacks such careful consideration and tends to be more relaxed and intimate

FORMALISM — an explicit statement of CATEGORIES and PRINCIPLES using a notational system grounded in mathematics or LOGIC. For example, PHRASE STRUCTURE RULES are formal statements about the internal structure of SENTENCES using a finite list of CATEGORIES (NP, VP, P, etc.) and symbols (the PLUS SIGN, PARENTHESES, CURLY BRACKETS, etc.) each of which has a unique, precise, and unambiguous definition.

FORMAL UNIVERSAL — a stipulation on the organization of GRAMMAR and on the form and functioning of grammatical rules, e.g., the stipulation that the SYNTACTIC rules of grammar must refer to PHRASE STRUCTURE.

FORMANT — see SOUND SPECTROGRAPH.

FRAGMENT SENTENCE — a portion of a sentence, such as a DEPENDENT CLAUSE or a PHRASE, punctuated as though it were a complete sentence, for example, the fragment beginning with *such as* in the following: *There are many animals that fly. Such as birds, bats, and bees.*

FREE MORPHEME — a MORPHEME that can stand alone, e.g., *like* in *unlikely*. Compare BOUND MORPHEME.

FREE RESIDENT — a word or PHRASE that is optional, e.g., the COMPLEMENTIZER *that* in *I believed (that) he will come*.

FREE VARIATION — unrestricted alternations in form or use, e.g., the pronunciation of the word *either* varies freely between [iðɔ̃] and [ayðɔ̃] for some speakers.

FREQUENCY — the rate at which the air in a sound wave oscillates (vibrates back and forth) in a given time. The faster the rate, the higher the frequency. The standard unit for frequency is HERTZ, abbreviated Hz. For example, if the VOCAL CORDS are vibrating at 220 Hz, then they are vibrating at 220 cycles per second, which means they are opening and closing 220 times per second. Sound produced by vibrating bodies, whether the strings of a violin or the human vocal cords, are composed of several frequencies. The *fundamental frequency* is the principal frequency produced and the frequency upon which *overtones* are based. Each overtone or *harmonic* is an integral multiple of the fundamental frequency; for example, if the vocal cords are vibrating at 220 Hz, then the first overtone is 440 Hz, the second overtone is 660 Hz, and so on. The different overtones impart a different quality or color to the sound called TIMBRE (or timber).

FRICATIVE — CONSONANTS formed by a closure in the VOCAL TRACT which causes turbulence in the air flow, thereby producing a hissing sound as in [f], [v], [s], [z], etc.

FRONT — see BACK versus NONBACK.

FRONTAL LOBE — that portion of the CEREBRAL CORTEX that controls motor coordination and higher intellectual functions like creativity, initiative, diligence, and the like. See Figure Six on Page 26.

FUNCTIONAL — pertaining to the grammatical purpose of some linguistic element as opposed to its form. For example, *the thief*, which has the form of a NOUN PHRASE, functions as the SUBJECT of the VERB *flee* in *The thief fled* and as the OBJECT of the verb *catch* in *They caught the thief*.

FUNCTIONAL CATEGORY — a CATEGORY that indicates how a GRAMMATICAL FORM is used. For example, the PREPOSITIONAL PHASE *with the red beard* has the function of a MODIFIER in the PHRASE *the man with the red beard* (cf. *the red-bearded man*). Compare STRUCTURAL CATEGORY.

FUNDAMENTAL FREQUENCY — see FREQUENCY.

FUSIONAL LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of STEM and AFFIXES that often mark several GRAMMATICAL CATEGORIES simultaneously. Greek, Latin, Sanskrit, Russian are inflectional languages. Often called INFLECTIONAL LANGUAGE. See also SYNTHETIC LANGUAGE and AGGLUTINATING LANGUAGE. See Figure Two II on Page 17.

FUTURE TENSE (FUT) — a TENSE referring to future time, e.g., *will work* as opposed to *works* (PRESENT TENSE) and *worked* (PAST TENSE).

GARDEN PATH SENTENCE — a SENTENCE that native speakers have a very difficult time understanding because they interpret its structure incorrectly. For example, upon reading *The horse raced past the barn fell*, most speakers interpret the sequence *the horse raced passed the barn* as a MAIN CLAUSE and then are confused by the appearance of the verb *fell*. However, if the sentence

is analyzed like *The horse ridden past the barn fell*, speakers realize that the main verb is *fell*. Compare ACCEPTABLE versus UNACCEPTABLE. See CUE.

GENDER (GEN) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) that refers to the tripartite distinction between MASCULINE, FEMININE, and NEUTER, specifically one of the three categories into which specific parts of speech like NOUNS are subdivided. In English, gender is related to sex generally, e.g., *woman, girl, lady, waitress*, etc. are feminine and referred to with the feminine pronouns *she, her, hers, herself*, etc., whereas *man, boy, gentleman, waiter*, etc. are masculine and referred to with the masculine pronouns *he, him, his, himself*, etc. In other languages, gender is purely GRAMMATICAL (related to GRAMMAR) and has nothing to do with sex. For example, in German, the word for *child* is neuter, meaning that it occurs with a specific set of grammatical forms appropriate to that class and distinct from others (it takes the neuter DEFINITE ARTICLE *das*, as opposed to the feminine *die* and masculine *der*).

GENERALIZATION — a PRINCIPLE with wide applicability over a significant range of linguistic phenomena, e.g., the principle that the rules of GRAMMAR are structure dependent, that is, depend on form as opposed to function.

GENERALIZED PHRASE STRUCTURE GRAMMAR (GPSG) — a formal grammatical theory, originally developed by Gerald Gazdar in the late 1970s, in which sentences are described with PHRASE STRUCTURE RULES that are CONTEXT FREE and with no TRANSFORMATIONAL RULES.

GENERATIVE GRAMMAR (GG) — a theory of GRAMMAR originated by Noam Chomsky in the mid 1950s to refer to a grammar which provides formal analyses of the PHONOLOGICAL, SYNTACTIC, and SEMANTIC structure of SENTENCES via a system of explicit rules such as PHRASE STRUCTURE RULES.

GENERATIVE SEMANTICS — a theory of grammar developed in the late 1960s by James McCawley, George Lakoff, and John Ross as an alternative to TRANSFORMATIONAL GRAMMAR. In generative semantics, all aspects of meanings are encoded in an abstract underlying syntactic representation.

GENITIVE CASE (GEN) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the possessor, e.g., *John's* in *John's book*. Often called “possessive case.”

GERMANIC LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes Gothic, Icelandic, Norwegian, Danish, Swedish, German, Yiddish, Dutch, and English.

GERUND [adj: **GERUNDIAL**] — a verbal noun, that is, a VERB that is used as a NOUN, e.g., *winning* in *John likes winning* and *Mary prevented John from winning*.

GLOBAL APHASIA — a severe impairment in both the comprehension and production of language. See GYRUS.

GLIDE — a glide is a CONSONANT like [w] and [y]. Typically, a glide is produced like a VOWEL, that is, it does not involve a stoppage of the air flow, but is distributed like a consonant, that is, it occurs before and after vowels, as in the word *wow*. Because of its relationship to vowels, a glide is sometimes called a “semivowel.”

GLOSS — a word or PHRASE, generally surrounded by single quotation marks, that translates the meaning of a linguistic expression from one language to another, e.g., Latin *facio* has the English gloss ‘I make.’

GLOTTAL STOP — a STOP CONSONANT made by a closure of the GLOTTIS, e.g., the sound [ʔ] heard in the exclamation [ʔ] *uh-oh*.

GLOTTIS [adj: **GLOTTAL**] — the opening between the VOCAL CORDS.

GOAL — the THEMATIC RELATION that identifies the direction of the state or action identified in the VERB, e.g., *to/into the library* in *He ran to/into the library*.

GOVERN — see GOVERNMENT.

GOVERNMENT — a formal relationship between a SYNTACTIC CATEGORY like VERB and its COMPLEMENT. Specifically, a TRANSITIVE VERB is said to govern its direct object if it C-COMMANDS the DIRECT OBJECT, which means that the NODE immediately dominating V (the VP node) must also DOMINATE the NOUN PHRASE functioning as the direct object. See TREE DIAGRAM.

GRADABLE ANTONYMS — ANTONYMS that are not absolute opposites but express degrees of difference; the negative of one is not synonymous with the other, e.g., *pretty* and *ugly*, *big* and *little*, etc. Compare COMPLEMENTARY ANTONYMS.

GRAMMAR [adj: **GRAMMATICAL**] — an explicit characterization of the structure of a particular language including all aspects of its PHONOLOGY, MORPHOLOGY, SYNTAX, and SEMANTICS.

GRAMMATICAL versus **UNGRAMMATICAL** — terms that refer to the status of a linguistic expression in terms of the application of rules. For example, a grammatical SENTENCE is one that does not violate any of the rules in a GRAMMAR in a particular language (*John called his mother up yesterday*); an ungrammatical one, does (**John called his mother yesterday up*). Compare ACCEPTABLE versus UNACCEPTABLE.

GRAMMATICAL CATEGORY — any CATEGORY of GRAMMAR, e.g., TRANSITIVE VERB, HIGH VOWEL, ANIMATE NOUN, etc.

GRAMMATICAL CHARACTERIZATION — an explicit account of the knowledge that NATIVE SPEAKERS have of their NATIVE LANGUAGE. Related to LINGUISTIC COMPETENCE.

GRAMMATICAL DESCRIPTION — same as GRAMMATICAL CHARACTERIZATION.

GRAMMATICAL FORM — a general expression to refer to any abstract structural element in a GRAMMAR.

GRAMMATICAL FUNCTION — see GRAMMATICAL RELATION.

GRAMMATICAL REALIZATION — an explicit account for the acquisition and use of a NATIVE LANGUAGE by NATIVE SPEAKERS. Related to LINGUISTIC PERFORMANCE.

GRAMMATICAL RELATION — a relation that one PHRASE in a CLAUSE has to other phrases including such relations as SUBJECT, DIRECT OBJECT, MODIFIER, etc. For example, in *The man kissed the woman passionately*, *the man* is the SUBJECT of *kissed*, *the woman* is the DIRECT OBJECT of *kissed*, and *passionately* is the MODIFIER of *kissed*. Also called “grammatical function,” “syntactic function,” and “syntactic relation.”

GRAVE/GRAVE ACCENT — the name of the DIACRITIC used most often to indicate a change in vowel quality or accent in various languages, e.g., à, è, ì, ò, ù.

GRICE’S MAXIMS — [after philosopher H. Paul Grice] — When people communicate, they generally cooperate with each other and follow four PRINCIPLES which help to make communication efficient: (i) the maxim of quantity: give as much information as is needed to be informative; (ii) the maxim of relevance: say things that pertain to the discussion; (iii) the maxim of manner: say things clearly and briefly; (iv) the maxim of quality: be truthful. When communication between people breaks down, it is often because one of these principles has been violated.

GRIMM’S LAW — [after Jakob Grimm, a German linguist (1785–1863)] — a SOUND CHANGE that occurred in the GERMANIC LANGUAGES involving the following correspondences:

PROTO-INDO-EUROPEAN	b ^h	d ^h	g ^h	b	d	g	p	t	k
	ḡ	ḡ	ḡ	ḡ	ḡ	ḡ	ḡ	ḡ	ḡ
GERMANIC	b	d	g	p	t	k	f	þ	x (or h)

These correspondences are seen in the initial CONSONANTS of COGNATES in Sanskrit and English like *bhratar* [b^hrat̪a] and *brother* [br ð̪a]; *dhāt̪* [d^ha] and *do* [du]; *daça* [d̪aʃa] and *ten* [t̪e]; *pitar* [p̪ita] and *father* [fað̪a]; *pad* [pa] and *foot* [f t]; and *trayas* [traʃa] and *three* [θ̪ri]. See HISTORICAL RECONSTRUCTION.

GYRUS [pl: GYRI] — a convolution in the CEREBRAL CORTEX separated from other convolutions by a deep groove (fissure) or a shallow groove (sulcus). The *supramarginal gyrus* and the *angular gyrus*, located in the PARIETAL LOBE, are association areas which integrate stimuli from many other areas of the brain. Damage to these gyri can lead to *global aphasia*, a severe impairment in both the comprehension and production of language. See Figure Six on Page 26.

HA,,EK — the name of the DIACRITIC shaped like a small “v” placed over a sound as in the phonetic symbols [š], [ž], [•], and [̂].

HAPLOLOGY — the loss of a SYLLABLE in the middle of a word as in the pronunciation of *vegetable* as [vɛtəbəl] or *probably* as [prəbli]. Compare SYNCOPE.

HARMONIC — see FREQUENCY.

HASA LINK — see SEMANTIC NETWORK.

HEAD — the minimal unit of a PHRASE, e.g., *books* in *all those new books on grammar*. Generally, the head of a phrase is the item that participates in AGREEMENT, e.g., the agreement between *dog* and *is* in *The dog chasing the cats is mean* and the agreement between *his* and *boy* in *Each boy in the class was asked to write his father a letter*.

HEAD FEATURE — a SYNTACTIC FEATURE referring to the kind of PHRASE in which an element can occur. See ENVIRONMENT OF NOUN HEAD, ENVIRONMENT OF VERB HEAD, and ENVIRONMENT OF CHARACTERIZER HEAD.

HEAD-ONLY CATEGORY — a SYNTACTIC CATEGORY that tolerates no ADJUNCTS in PREHEAD or POSTHEAD position on its own internal levels, e.g., the categories DETERMINER and COMPLEMENTIZER.

HEDGE — a word or expression like *generally* in *Linguists generally hedge on important issues*, which speakers use when they are unsure of themselves or do not want to commit themselves to making an unqualified statement. Other hedges include: *sort of, kind of, in a sense, in a real sense, more or less, in a way, roughly, details aside, rather, essentially, practically, in essence, for the most part, literally, and so on*.

HELLENIC LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes Ancient and Modern Greek. Although there is only one language in this branch, Greek has been very important in INDO-EUROPEAN studies because the surviving literature in Greek is extensive and some of the manuscripts are very old (900 B.C.).

HELPING VERB — equivalent to AUXILIARY VERB.

HEMISPHERECTOMY — the removal of a hemisphere of the CEREBRAL CORTEX often required as a result of a large infiltrating tumor which cannot itself be removed. Generally, a hemispherectomy causes immediate paralysis and loss of sensation on the opposite side of the body, i.e., if the right hemisphere is removed, then the left side of the body is affected.

HERTZ — see FREQUENCY.

HESCHL'S GYRUS [from R.L. Heschl, Austrian pathologist, 1825–1881] — the primary auditory area of the TEMPORAL LOBE (Areas 41 and 42) concerned with the gross perception of sound in terms of FREQUENCY, LOUDNESS, and TIMBER. See Figure Six on Page 26.

HIERARCHY [adj: **HIERARCHICAL**] — any classification of items organized in terms of subordinate and superordinate classes. For example, the class vertebrates, which includes all animals with a backbone, is subdivided into mammals, birds, reptiles, amphibians, and fish; further, each of these classes contains further subdivisions and other subdivisions of subdivisions until one reaches an individual organism like the African elephant or homo sapiens. Similarly, in reference to sentence structure, SENTENCES consist of VERB PHRASES which consist of a VERB and an optional NOUN PHRASE which in turn consists of a NOUN and other optional elements. The sentences of all human languages are organized in a hierarchy of PHRASES often specified in PHRASE STRUCTURE RULES or represented equivalently in a TREE DIAGRAM or LABELED BRACKETING.

HIEROGLYPHIC — a system of writing consisting of pictorial symbols, e.g., “○” to signify the sun, “.” to signify water, and “®” to signify a fish, as well as symbols that represent individual sounds. Compare PICTOGRAM and IDEOGRAM.

HIGH ([+HIGH]) versus **NONHIGH** ([–HIGH]) — a PHONETIC FEATURE OPPOSITION. High sounds are produced by raising the body of the tongue above the level that it occupies in neutral position as in [i] and [u]; nonhigh sounds are not produced with such a raising of the body of the tongue as in [e] and [o].

HISTORICAL LINGUISTICS — the study of the history of a language such as the development of Old English into Middle English and Middle English into Modern English.

HISTORICAL RECONSTRUCTION — the reconstruction of an ancient language with no written heritage through the examination and comparison of COGNATE words and structures in DAUGHTER languages (languages believed to be descendants of the ancient language). For example, the word for *mother* is very similar in many INDO-EUROPEAN LANGUAGES: *Mutter* (German), *m't'r* (Greek), *m-thair* (Irish), *m-ter* (Latin), *madre* (Spanish and Italian), *mat'* (Russian), *m-tar* (Sanskrit), *mátá* (Hindi). The similarity in the phonetic form of all the words in daughter languages suggests that they are descendant from the same source which linguists postulate to be **m-ter* (the asterisk means that the form is unattested, that is, there is no written documentation that the form ever existed). See GRIMM'S LAW and CENTUM LANGUAGES versus SATEM LANGUAGES. See also LARYNGEAL HYPOTHESIS.

HOLONYM — the whole in a whole/part relationship, e.g., *house* is a holonym of *room*. Compare MERONYM. See also COMPONENTIAL.

HOLOPHRASTIC SPEECH — the early speech of children in which a single word represents an entire SENTENCE. For example, children might say *Milk* meaning 'I want some milk' or *Truck* meaning 'There is a truck.'

HOMOGRAPH — homographs are words that are pronounced differently but spelled the same, e.g., *bow* ([bo] and [baw]), *lead* ([lid] and [leɪ]), *wind* ([wɪnd] and [waɪnd]), *wound* ([wʊnd] and [waʊnd]), etc. Compare HOMONYM and HOMOPHONE.

HOMONYM — homonyms are words that are pronounced the same but have different meanings, e.g., *bank* (river's edge) and *bank* (financial institution). Compare HOMOPHONE and HOMOGRAPH.

HOMOPHONE — homophones are words that are pronounced the same but spelled differently, e.g., *pear/pair*, *colonel/kernel*, *right/write*, etc. Compare HOMONYM and HOMOGRAPH.

HOMORGANIC — having the same or very similar characteristics. For example, in PHONETICS, sounds are said to be homorganic if they have the same or very similar set of DISTINCTIVE FEATURES such as [t] and [d] which are ALVEOLAR STOPS ([+CONSONANTAL, -VOCALIC, -CONTINUANT, +ANTERIOR, +CORONAL]).

HYPERBOLE — a FIGURE OF SPEECH involving deliberate exaggeration for effect, as in *an ocean of trivial details*, and *a mountain of work*. Compare LITOTES.

HYPERNYM — the class in a class/member relationship, e.g., *bird* is a hypernym of *robin*. Compare HYPONYM. See also TYPOLOGICAL

HYPONYM — the member in a class/member relationship, e.g., *robin* is a hyponym of *bird*. Compare HYPERNYM. See also TYPOLOGICAL.

HYPOTHESIS [adj: **HYPOTHETICAL**] — a reasoned statement proposed in an effort to explain some natural phenomenon using suggestive, inferential evidence as opposed to concrete, confirming evidence. For an example in linguistics, see LARYNGEAL HYPOTHESIS.

IAMB [adj: **IAMBIC**] — a metrical FOOT consisting of one short or unstressed SYLLABLE followed by one long or stressed syllable (˘ –), as in the words *agree*, *below*, *goodbye*, etc.

IAMBIC PENTAMETER — a verse consisting of five metrical feet composed of IAMBS, as in *The rules of grammar could be brought to light, If only you would analyze them right* (˘ – ˘ – ˘ – ˘ – ˘ – / ˘ – ˘ – ˘ – ˘ – ˘ –).

IDEATIONAL APRAXIA — see APRAXIA.

IDEOGRAM — a pictorial symbol that represents a concept such as various traffic signs for *stop*, *no left turn*, *no parking*, *curve ahead*, and so on. An ideogram is generally established by convention and has a less direct connection with what it represents than a PICTOGRAM because an ideogram represents a concept rather than a specific object like a tree or a star.

IDEOMOTOR APRAXIA — APRAXIA.

IDIOLECT [adj: **IDIOLECTAL**] — the particular **SPEECH** and **LANGUAGE** patterns of an individual speaker.

IDIOM [adj: **IDIOMATIC**] — a highly specialized expression whose meaning typically cannot be deduced from the meaning of the words out of which it is composed. Expressions like *shoot the breeze*, *be up tight*, and *so long* are examples of idioms. In most instances, idioms are fixed in usage and cannot be expanded or modified. For example, one cannot say **We shot a southwesterly breeze yesterday*.

ILLATIVE CASE — an **INFLECTION** in **SUBSTANTIVES** (nouns, pronouns, etc.) generally used to express motion into. For example, in Estonian, the phrase *kohvikusse* (**ROOT** *kovik-*) means ‘into the coffee house.’

ILLATIVE (ILL) — the **POSITIONAL THEMATIC RELATION** expressing motion into, e.g., *He got on(to) the horse* and *He jumped into the pool*. Compare **ELATIVE**.

ILLOCUTIONARY ACT — see **SPEECH ACT THEORY**.

ILLOCUTIONARY FORCE — see **SPEECH ACT THEORY**.

ILLUSTRATORS — see **BODY LANGUAGE**.

IMMEDIATE CONSTITUENT ANALYSIS — the exhaustive analysis of a **SENTENCE** into all of its possible syntactic units as indicated in a **TREE DIAGRAM** or **LABELED BRACKETS** like the following:

[_S [_{NP} [_{DET} the] [_N city]] [_{AUX} [_{MOD} must]] [_{VP} [_V burn] [_{NP} [_{DET} this] [_N book]]]]

IMMEDIATE DOMINANCE — a **FORMAL HIERARCHICAL** relationship between **SYNTACTIC** units (**NODES**) in **PHRASE STRUCTURE**. A node " immediately **DOMINATES** a node \$ if " dominates \$ and there is no intervening node between " and \$. See **TREE DIAGRAM**.

IMPERATIVE MODE/MOOD (IMP) — an **INFLECTION** in **VERBS** used to express commands like *Stop!*

IMPERATIVE SENTENCE — a **SENTENCE** that gives a command or make a request, e.g., *Please, write Helen a letter*.

IMPLICATURE — see **CONVERSATIONAL IMPLICATURE**.

IMPLICIT PERFORMATIVE — see **PERFORMATIVE UTTERANCE** versus **CONSTATIVE UTTERANCE**.

INALIENABLE — see **ALIENABLE** versus **INALIENABLE**.

INALIENABLE NONPOSSESSOR (NIPS) — the THEMATIC RELATION indicating the entity lacking an INALIENABLE object or quality.

INALIENABLE POSSESSION — inalienable possession is the possession of relatively permanent, intrinsic objects or attributes (e.g., one's children, one's blue eyes, one's ambition), whereas ALIENABLE POSSESSION refers to the possession of relatively transient and extrinsic objects or attributes (e.g., one's home, one's money).

INALIENABLE POSSESSOR (IPS) — the THEMATIC RELATION indicating the possessor of INALIENABLE objects or attributes, e.g., *John* in *John has blue eyes*.

INANIMATE — a SEMANTIC CATEGORY referring to non-living things like rocks and cars. Opposed to ANIMATE.

INCHOATIVE VERB — a VERB that expresses the idea of becoming something, such as *liquefy* in *The metal liquefied*, *darken* in *The sky darkened*, and *die* in *The tiger died*. See CAUSATIVE VERB.

INDEFINITE ARTICLE/DETERMINER — an ARTICLE/DETERMINER that is nonspecific in reference, e.g., *a* in *a book* or *an* in *an apple*.

INDEFINITE PRONOUN — a PRONOUN that refers to indefinite persons and things, e.g., *someone*, *anybody*, and *everything*.

INDEPENDENT CLAUSE — a CLAUSE that can stand alone; hence, a SENTENCE is an independent clause.

INDICATIVE MODE/MOOD — an INFLECTION in VERBS used to express DECLARATIVE SENTENCES like *He stopped*.

INDIRECT COMMAND — an EMBEDDED command, e.g., *I ordered John to stop singing*. Opposed to a direct command like *John, stop singing!* Compare INDIRECT QUESTION and INDIRECT STATEMENT.

INDIRECT OBJECT — a GRAMMATICAL RELATION that expresses the recipient of the action described in a VERB, e.g., *to John* in *Mary sold the car to John*.

INDIRECT QUESTION — an EMBEDDED question, e.g., *I asked John what he had bought*. Opposed to a direct question like *John, what did you buy?* Compare INDIRECT COMMAND and INDIRECT STATEMENT.

INDIRECT STATEMENT — an EMBEDDED statement, e.g., *I told John that I would go*. Opposed to a direct statement like *John, I will go*. Compare INDIRECT COMMAND and INDIRECT QUESTION.

INDO-EUROPEAN LANGUAGES — a family of languages spoken in much of Europe, Asia, and the Americas which includes the following branches: GERMANIC (English, German, Dutch, Swedish, etc.), ITALIC (Latin, French, Spanish, Italian, etc.), BALTO-SLAVIC (Russian, Polish, Czech, Lithuanian, etc.), INDO-IRANIAN (Sanskrit, Hindi, Bengali, Persian, etc.), CELTIC (Irish, Welsh, Gaelic, etc.), HELLENIC (Ancient and Modern Greek), and ANATOLIAN (Hittite, Lydian, Luwian, etc.). The Indo-European languages have a special place in linguistics because they include so many politically and culturally important languages and because they are among the world's best understood and most thoroughly documented languages. Some written records of Indo-European are nearly 4,000 years old. See PROTO-INDO-EUROPEAN.

INDO-IRANIAN LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes the Indic languages (Sanskrit, Pali, Hindi, Bengali, etc.) and the Iranian languages (Avestan, Persian, Kurdish, etc.).

INDUCTION [adj: **INDUCTIVE**] — a type of reasoning that arrives at conclusions based on observations and works from the “bottom up” by generalizing from instances. For example, if most cats that we have observed meow, we induce that Binkie, a cat we do not know, will meow, and we arrive at the conclusion that all cats meow. Compare DEDUCTION.

INESSIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express location. For example, in Estonian, the phrase *kohvikus* (ROOT *kovik-*) means ‘in the coffee house.’ Also called “locative case.”

INFINITIVE — a PHRASE in English consisting of the word *to* followed by a bare verb (one with no inflections), e.g., *to err* in *To err is human* and *It is human to err*.

INFLECTION [adj: **INFLECTIONAL**] — the process of combining inflectional endings with roots, e.g., the variation seen in *play, plays, played, playing, etc.*

INFLECTIONAL ENDING — a SUFFIX that is added to a ROOT or STEM to indicate grammatical relationships, e.g., the *-s* added to the root *play* to indicate PLURAL NUMBER.

INFLECTIONAL LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of STEM and AFFIXES that often mark several GRAMMATICAL CATEGORIES simultaneously. Greek, Latin, Sanskrit, Russian are inflectional languages. Often called FUSIONAL LANGUAGE. See also SYNTHETIC LANGUAGE and AGGLUTINATING LANGUAGE. See Figure Two II on Page 17.

INFORMAL LANGUAGE — see FORMAL versus INFORMAL LANGUAGE.

INGRESSIVE (IGR) — NONSTATIVE or [“DSJ, -“CNJ] relations, that is, relations involving causation or motion.

INHERITANCE — see SEMANTIC NETWORK.

INHERITED WORD — same as NATIVE WORD.

INNATE — present at birth, that is, part of an organism's genetic makeup.

INNATENESS HYPOTHESIS — the HYPOTHESIS that the acquisition of a NATIVE LANGUAGE is the result of a genetic predisposition in human beings to acquire language. See RATIONALISM.

INSTRUMENTAL CASE (INS) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark an INSTRUMENTAL THEMATIC RELATION.

INSTRUMENTAL (INS) — the THEMATIC RELATION indicating the INANIMATE entity perceived as the instrument by which the action identified in the predicate occurs, e.g., the phrase *with a mop* in *He cleaned the floor with a mop*.

INTENSIFIER — an ADVERB which intensifies the meaning of the word it modifies, e.g., *extremely* in *extremely loudly* or *terribly* in *terribly sick* or *barely* in *barely over the hill*.

INTENSIFYING ADVERB — same as INTENSIFIER.

INTENSIVE PRONOUN — a PRONOUN that emphasizes a preceding NOUN or PRONOUN, e.g. *myself*, *itself*, and *themselves*. The form of reflexive and intensive pronouns is the same. In *I myself saw myself in the mirror*, the first *myself* is intensive, the second is reflexive.

INTERDENTAL — formed by a constriction behind the upper teeth, as in the sounds [ɸ] and [ð].

INTERJECTION — one of the traditional PARTS OF SPEECH that includes words such as *Ouch!* and *Wow!* used to express some emotion like surprise, disgust, sorrow, joy, etc.

INTERROGATIVE PRONOUN — a PRONOUN that is used in place of NOUN PHRASES in questions, e.g., *who*, *which* and *what*.

INTERROGATIVE SENTENCE — a SENTENCE that asks a question, e.g., *Did John write Helen a letter.*

INTONATION — the relative level of pitches (FREQUENCY) and intensity (AMPLITUDE) as well as the melody (RHYTHM) that accompany an utterance, e.g., the tendency to utter a direct command like *Get out* with greater intensity and rising pitches than a sentences like *I'd like you to leave*.

INTONATION CONTOUR — a specific intonation pattern, e.g., the tendency in English to ask questions with a rising pitch at the end of the sentence.

INTRANSITIVE VERB — a VERB that does not take an OBJECT, e.g., *break* in *The vase broke*, and *disappear* in *The vase disappeared*.

IRREGULAR — see MARKED versus UNMARKED.

ISA LINK — see SEMANTIC NETWORK.

ISLAND — a term used in recent TRANSFORMATIONAL GRAMMAR for a structure that is impervious to MOVEMENT. For example, a RELATIVE CLAUSE is an island out of which no CONSTITUENT can be moved. Thus, given *John knows the man whom Mary gave a book to*, one cannot ask the question **Which book does John know the man whom Mary gave to?* See ROSS' CONSTRAINTS.

ISOGLOSS — a line on a map indicating a boundary that separates regions using different linguistic forms, such as the boundary separating regions where a soft drink is called *pop* from regions where it is called *soda*, and the boundary separating regions where the words *poor* and *pour* are pronounced differently from regions where they are pronounced the same.

ISOLATING LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of single MORPHEMES or where the most words consist only of a ROOT. Mandarin Chinese, Vietnamese, Cantonese, and Cambodian are analytic languages. Often called ANALYTIC LANGUAGE. See Figure Two I on Page 16.

ITALIC LANGUAGES — a subgroup of INDO-EUROPEAN LANGUAGES that includes Latin, French, Spanish, Italian, and Romanian.

JARGON — language that has special meaning to a particular group of speakers, e.g., words like *phoneme*, *morpheme* and *syntax* are part of the jargon of linguists, words like *strike*, *foul* and *shortstop* have particular usages in baseball, words like *crescendo*, *forte*, and *score* have special meaning to musicians, etc.

JARGON APHASIA — a language impairment characterized by unintelligible and meaningless sequences of sounds produced as words that seem to make sense to the afflicted individual, e.g., *I snorked a blunk*. One of the characteristics of WERNICKE'S APHASIA.

JUNCTURE — a feature in the PHONOLOGY of a language which separates GRAMMATICAL units and may be signaled by silence or a variety of changes such as PITCH, STRESS and LENGTH. For example, the difference between *see Mabel* and *seem able* is a difference in the juncture between the two elements, respectively [si+meb**ə**] and [sim+eb**ə**].

KINESICS — the technical term for BODY LANGUAGE.

L1 ACQUISITION — the acquisition of a NATIVE LANGUAGE as a child.

L2 ACQUISITION — the acquisition of a SECOND LANGUAGE usually as an adult.

LABELED BRACKETS — the linear equivalent of a TREE DIAGRAM, e.g., a representation like the following:

[_S [_{NP} [_{DET} the] [_N city]] [_{AUX} [_{MOD} must]] [_{VP} [_V burn] [_{NP} [_{DET} this] [_N book]]]]

LABIAL ([+LAB]) versus **NONLABIAL** ([-LAB]) — a PHONETIC FEATURE OPPOSITION. Labial sounds are articulated with one or both the lips. These include BILABIAL sounds like [p], [b], [m], [w], and [ɸ], and LABIODENTAL sounds like [f] and [v]. Nonlabial sounds are not articulated with the lips.

LABIODENTAL — a constriction formed with the lower lip and upper teeth as in the sounds [f] and [v].

LABIOVELAR — a constriction formed simultaneously at the mouth and the VELUM as in the articulation of [k^w] in *quit*.

LANGUAGE — a symbolic system consisting of a finite set of rules for relating sound and meaning used by human beings to communicate. See GRAMMAR.

LANGUAGE ACQUISITION — the acquisition of a NATIVE LANGUAGE or a SECOND LANGUAGE.

LANGUAGE PLANNING — the attempt to solve problems in communication that occur in a geographical region (city, state, country, etc.) because the speakers living there use different languages and/or DIALECTS. Generally, the differences are studied systematically and an official language policy is proposed in an effort to provide all speakers in the region with a common ground for communication.

LARYNGEAL — (i) Broadly, the term *laryngeal* means involving the LARYNX. (ii) In PHONETICS, a sound that has a primary constriction in the larynx is sometimes referred to as a *laryngeal*, although the term *glottal* is more common, e.g., the GLOTTAL STOP [ʔ] in the exclamation [ʔ] *uh-oh*.

LARYNGEAL HYPOTHESIS — in INDO-EUROPEAN studies, the HYPOTHESIS, originally proposed by Ferdinand de Saussure in 1879, that PROTO-INDO-EUROPEAN contained a series of LARYNGEAL CONSONANTS which completely disappeared in all the daughter languages and were responsible for the variations in the QUALITY or QUANTITY of VOWELS seen in many ROOTS. In the early 1900s, Hittite, an ANATOLIAN language, was discovered and identified as INDO-EUROPEAN. The decipherment of Hittite revealed the first concrete evidence that the INDO-EUROPEAN languages did contain laryngeal consonants since the consonants are preserved in the writing system. As a result, Saussure's hypothesis, worked out solely on the basis of the method of HISTORICAL RECONSTRUCTION, was confirmed.

LARYNGECTOMY — the surgical removal of the LARYNX.

LARYNX [adj: **LARYNGEAL**] — a funnel-shaped structure situated on the top of the trachea (windpipe) containing the **VOCAL CORDS**. The larynx is the primary organ of **PHONATION** (sound production) in humans. Sound is produced by the vibration of the vocal cords and regulated by movements of the cartilages (bony structures) of the larynx.

LATERAL — a sound such as [l] in *pill* [pɪl] and [ɫ] in *lip* [ɫɪp] produced by lowering the sides of the tongue.

LATERALIZATION — See **CEREBRAL LATERALIZATION**.

LAX — same as **NONTENSE**.

LEARNED WORD — a word that is coined in one language from the **ROOTS** and **AFFIXES** of words in another, e.g., *telegraph* (Greek *tele* ‘far’ and *graph* ‘write’) and *fragile* (Latin *fragilis* ‘breakable’). Compare **BORROWED WORD** and **NATIVE WORD**.

LEFT BRANCH CONDITION — see **ROSS’ CONSTRAINTS**.

LEFT BRANCHING CONSTRUCTION — a **CONSTRUCTION** whose internal dependency relationships branch to the left, that is, the most deeply **EMBEDDED CONSTITUENT** is the one furthest to the left, as in *Mary’s brother’s wife’s mother’s dog is named Spot*. Compare **MULTIPLE BRANCHING CONSTRUCTION**, **RIGHT BRANCHING CONSTRUCTION**, **NESTED CONSTRUCTION**, and **CENTER EMBEDDED CONSTRUCTION**.

LEFT DISLOCATION — see **RESUMPTIVE PRONOUN**.

LEFT HEMISPHERE — one of the two hemispheres of the **CEREBRAL CORTEX** with specialized functions, in most human beings, related to the comprehension and production of speech and language.

LENGTH — a variation in the duration of a sound. See **LONG** versus **SHORT**.

LESION — a general term for damage to a bodily organ such as the brain as a result of injury or disease.

LEVELS OF ADEQUACY — There are several levels of adequacy that scientists can attain in characterizing natural phenomena. On one level, the level of **OBSERVATIONAL ADEQUACY**, scientists merely note that some particular phenomena occur. For example, a linguist might note that the **PAST TENSE** of **REGULAR VERBS** in English is pronounced in three ways: [t] as in *hunted*, [d] as in *walked*, and [d] as in *climbed*. On a higher level, **DESCRIPTIVE ADEQUACY**, scientists attempt to describe the occurrence of phenomena with explicit statements. In the case of English past tense, these are rules like the following:

- (i) PAST is pronounced [t] after {t, d} (*hunted, avoided*)

- | | | | |
|-------|------------------------|-----------------|----------------------------|
| (ii) | PAST is pronounced [t] | after [-VOICED] | (<i>walked, kissed</i>) |
| (iii) | PAST is pronounced [d] | after [+VOICED] | (<i>climbed, showed</i>) |

On the highest level, EXPLANATORY ADEQUACY, scientists attempt to offer an explanation for their description, that is, they attempt to relate the description to general principles. For example, the rules in (i) – (iii) can be related to the following general linguistic principles:

- (iv) A language cannot contain long final stops.
- (v) Adjacent sounds assimilate distinctive features.

Principle (iv) derives directly from the nature of STOP CONSONANT articulation by a human vocal apparatus: a stop consonant stops the air as it leaves the VOCAL TRACT; such stoppage cannot be lengthened at the end of a word. Principle (v) specifies the natural articulation of adjacent phonological segments: it is natural to make adjacent sounds similar in voicing, particularly when they occur at the end of a word. See ASSIMILATION.

LEXEME — a head word or base form listed in a LEXICON such as the lexeme *employ* which is the base form for the DERIVATIVES *employs, employed, employing, employer, employers, employee, employees, employment, employable, employability, unemployed, unemployment, unemployable, unemployability*, etc.

LEXICAL AMBIGUITY — ambiguity at the level of the word, e.g., *bug* meaning ‘an insect’ or ‘a problem in a computer’ in *She found a bug*.

LEXICAL — pertaining to a word.

LEXICAL DECOMPOSITION — a term originating in GENERATIVE SEMANTICS for the analysis of words into components of meaning, such as the analysis of *kill* as ‘cause to become not alive.’ In some words, the MORPHOLOGICAL units are overt (present as part of the word). For example, in *solidify*, the suffix *-ify* means ‘cause to become’ (cf. *liquefy, pacify, electrify*, etc.); however, in *kill*, there is no overt morpheme meaning ‘cause to become.’ Generative semanticists have argued that that difference is irrelevant, and that *kill* should be analyzed the way *solidify* is analyzed.

LEXICAL DENSITY — a measure of the ratio between the number of different words in a TEXT and the number of total words in a text. For example, if a text of 100 words contains 25 different words, then it has a lexical density of 25% (.25); however, if it contains 50 different words, then it has a lexical density of 50% (.50). The concept of lexical density is often used as an indicator of the complexity of a text such that the higher the density, the more complex (difficult to understand) the text is. Also called “type–token ratio.” See TYPE versus TOKEN.

LEXICAL ENTRY — the LEXICAL specification for a LEXEME, including its SPELLING, PHONEMIC FORM, PHONETIC FORM, ETYMOLOGY, DERIVATIVES, CONSTRUCTIONS, MEANINGS, etc.

LEXICAL ITEM — a lexical item is a WORD.

LEXICAL–FUNCTIONAL GRAMMAR (LFG) — a formal GRAMMATICAL theory, originally developed in the late 1970s by Joan Bresnan and Ronald Kaplan as an alternative to the STANDARD THEORY of TRANSFORMATIONAL GRAMMAR. LFG attempts to provide grammatical descriptions which are psychologically realistic and in accord with PSYCHOLINGUISTIC research. Many of the relationships which are described in the standard theory with TRANSFORMATIONAL RULES, e.g., the PASSIVE VOICE, are accounted for with LEXICAL RULES in LFG.

LEXICAL RULES — rules that are part of the LEXICAL component of a GRAMMAR as opposed to the SYNTACTIC component such as rules for the alternation between *John admires Bill* and *Bill is admired by John*. In the STANDARD THEORY, the relationship between ACTIVE and PASSIVE sentences is described transformationally by, among other things, the movement of the DIRECT OBJECT to SUBJECT position turning *Someone admires Bill* into *Bill is admired*. An alternative way of accounting for the active/passive relationship is to provide lexical entries which specify the relationship directly, such as $NP_1 \text{ admire } NP_2 = NP_2 \text{ be admired (by } NP_1)$, or in a more generalized form as $NP_1 + \text{ VERB} + NP_2 = NP_2 + \text{be} + \text{VERB} + \text{-ed (by } NP_1)$.

LEXICOGRAPHY — the study of dictionaries including the types of information they contain and how that information should be represented and organized.

LEXICON — the dictionary composed of LEXICAL ENTRIES and LEXICAL RULES.

LIMBIC versus **NONLIMBIC** — a limbic stimulus is one that stimulates a survival instinct such as eating, drinking, sleeping, reproduction, self–preservation, and the like. A non–limbic stimulus is one that does not ordinarily or primarily stimulate a survival instinct such as a book, a bell, a clock, a flashlight, a sunset, a job promotion, and so on.

LINEAR FEATURE — a SYNTACTIC FEATURE referring to the left–to–right order of elements in a PHRASES, specifically whether or not an element can occur before the HEAD of the phrase ([±PREHEAD]) and whether or not an element can occur after the HEAD of a phrase ([±POSTHEAD]). For example, in English DETERMINERS are [+PREHEAD, –POSTHEAD] (*the book*, **book the*); in Thai, they are [–PREHEAD, +POSTHEAD]. MANNER ADVERBS in English are [+PREHEAD, +POSTHEAD] (*She willingly agreed*; *She agreed willingly*).

LINEAR ORDER — the left to right ordering of the elements of PHRASES. See TREE DIAGRAM.

LINGUA FRANCA — a language used as a common language among speakers of different languages generally in commerce and international relations. Today, English is the most common lingua franca.

LINGUIST — (i) technically, a person engaged in the scientific study of language; (ii) popularly, a person who speaks many languages.

LINGUISTIC COMPETENCE — the unconscious knowledge that one has of a language, generally one’s NATIVE LANGUAGE. Compare LINGUISTIC PERFORMANCE.

LINGUISTIC PERFORMANCE — the acquisition and use of a language, generally one's NATIVE LANGUAGE. Compare LINGUISTIC COMPETENCE.

LINGUISTIC UNIVERSAL — a particular FEATURE or PRINCIPLE which could potentially occur in a human language and one which derives directly from the nature of the human language apparatus including the brain and the organs of speech and hearing. For example, since human beings cannot count and speak at the same time, there is no rule in any human language that depends upon counting the words in a sentence. In English, questions are formed by inverting the order of the SUBJECT phrase and the AUXILIARY phrase (*The girl will go* versus *Will the girl go*). Such a rule is possible because it is based on the PHRASE. There is, however, no rule like the following: to form a question invert the third and fourth words, because human cannot count the number of words in a sentence as they say them. See FORMAL UNIVERSAL and SUBSTANTIVE UNIVERSAL.

LINGUISTICS [adj: LINGUISTIC] — the scientific study of language.

LINK — see SEMANTIC NETWORK.

LIQUID — a CONSONANTAL sound resulting when the tongue restricts air flow from the mouth such as the sounds [r] and [l].

LISP — (i) a SPEECH deficit characterized by the substitution of [ɸ] for [s] and [ð] for [z]; (ii) a PROGRAMMING LANGUAGE designed for the easy manipulation of data strings, such as SENTENCES, and widely used in ARTIFICIAL INTELLIGENCE.

LITOTES — a FIGURE OF SPEECH in which, for effect, one says the opposite of what is known to be the case, e.g., calling a particularly busy day at work a holiday. Compare HYPERBOLE.

LOAN TRANSLATION — the formation of a word in one language by translating an expression in another language, such as the names of the days of the week in English, e.g., *Monday* is a loan translation of Latin *dies lunae* 'day of the moon.' The English expression *power politics* is a loan translation of German *Machtpolitik*. Also called "calque."

LOAN WORD — see BORROWED WORD.

LOCATIVE CASE (LOC) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark a location in space, e.g., the *-e* ending on a Sanskrit noun like *ṣye* meaning 'in the mouth' as opposed to other endings like the ABLATIVE ending *-ṣ* in *asy ṣ* meaning 'from the mouth' or the DATIVE ending *-ya* in *asy ya* meaning 'to the mouth.' Locative relations are expressed in English by prepositional phrases like *in the room, on the desk, near the lamp*, etc.

LOCATIVE (LOC) — the POSITIONAL THEMATIC RELATION that identifies the location or spatial orientation of the state or action identified in the verb, e.g., *He was on the horse* and *He was in the pool*.

LOCUTION [adj: **LOCUTIONARY**] — any linguistic expression (WORD, PHRASE, SENTENCE, etc.) generally considered in reference to the CONTEXT in which it is used. See STYLISTICS.

LOCUTIONARY ACT — see SPEECH ACT THEORY.

LOGIC — broadly, the science which deals with the investigation and statement of the FORMAL principles, criteria, and methods used to distinguish correct reasoning from incorrect reasoning. The goal of logic is to prove that any particular theorem or principle is correct or incorrect. The role of logic in linguistic analysis has primarily involved the formal statement of the rules and principles contained in a GRAMMAR. See MODAL LOGIC, PROPOSITIONAL CALCULUS, and PREDICATE CALCULUS.

LOGICAL FORM (LF) — (i) the FORMAL representation of meaning as determined by GRAMMATICAL structure; (ii) one of the two interpretative components in a TRANSFORMATIONAL GRAMMAR, which contains the representation of the meaning of SENTENCES. Compare PHONETIC FORM (PF).

LOGOGRAPHIC WRITING — see WRITING.

LONG versus **SHORT** — a variation in pronunciation related to the duration of a sound: a long sound is articulated longer than a short one. Often represented in WRITING or PHONETIC TRANSCRIPTION by a MACRON placed over the sound, a colon placed after it or a repetition of the sound, e.g. *a* versus \sim or *a:* or *aa*. English has ALLOPHONIC distinctions in VOWEL LENGTH depending on the nature of the consonant following the vowel: if the consonant is VOICELESS, then the vowel is short, e.g., [b~~v~~], if the consonant is VOICED, then the vowel is long, e.g., [b~~v~~]. In Latin, length of both vowels and consonants is PHONEMIC: *os* [os] ‘bone’ versus C [C] ‘mouth’; *sumus* [s m s] ‘we are’ versus *summus* [s mm s] ‘highest.’

LONG MARK — generally equivalent to a MACRON.

LONG TERM MEMORY (LTM) — the storage and recall of information that is not new, such as one’s birth date. Compare SHORT TERM MEMORY (STM).

LOW ([+LOW]) versus **NONLOW** ([–LOW]) — a PHONETIC FEATURE OPPOSITION. Low sounds are produced by lowering the body of the tongue below the level that it occupies in neutral position, e.g., the VOWEL [a]; nonlow sounds are produced without such a lowering of the body of the tongue, e.g., the vowels [i], [e], [u], and [o].

MACHINE TRANSLATION — see COMPUTATIONAL LINGUISTICS.

MACRON — the name of the DIACRITIC consisting of a straight line placed over a letter. Generally, when placed over a VOWEL, a macron indicates that the vowel is LONG. See LONG versus SHORT.

MAIN CLAUSE — a CLAUSE to which all other clauses in a SENTENCE are SUBORDINATE, e.g., in the sentence *The man that Sue is going to marry is a linguist*, the main clause is *The man is a linguist*.

MAIN VERB — the VERB in a CLAUSE that carries the TENSE and agrees with the SUBJECT in NUMBER, e.g., the verb *wants* in *John wants to be a linguist*.

MANNER ADVERB — an ADVERB which modifies the meaning of a VERB and usually answers the question *How?* For example, *carelessly* and *carefully* in *John dresses carelessly/carefully*. Compare SENTENCE ADVERB.

MANNER OF ARTICULATION — the way in which a SPEECH sound is produced by the VOCAL APPARATUS such as the vibration of the VOCAL CORDS to produce a VOICED sound, the lowering of the VELUM to produce a NASAL sound, the complete stoppage of the air stream followed by a sudden release to produce a STOP, the raising of the tongue to produce a HIGH VOWEL, and the like. Compare PLACE OF ARTICULATION.

MARKED versus **UNMARKED** — an unmarked form is one that is regular, expected and predictable; a marked form is one that is irregular, unexpected and unpredictable. For example, the unmarked form of the PAST TENSE of the VERB *dive* is *dived* [dayvd], which follows the pattern seen in most verbs. The MARKED form of the PAST TENSE of the VERB *dive* is *dove* [dov], which is irregular, cannot be predicted and, therefore, must be heard to be acquired. See ANALOGY.

MASCULINE (MASC) — see GENDER.

MASS NOUN — a NOUN that is not numerable, e.g., *butter*, *water*, and *furniture*.

MATHEMATICAL LINGUISTICS — a branch of LINGUISTICS concerned with the FORMAL properties of GRAMMARS, including PARSERS, and the statistical analysis of language.

MAXIMAL PROJECTION — The maximal projection for a category X is the highest projection of X (the highest bar-value for X), which is XP in some theories and X³ in others. See X-BAR SYNTAX.

MEAN LENGTH OF UTTERANCE (MLU) — a measure of the length of children's utterances obtained by taking a sample of about one hundred utterances, counting the total number of MORPHEMES uttered, and dividing by one hundred to establish a mean. The MLU is used as a measure of children's language development in their first language.

MEANING — a general term in linguistics for what a MORPHEME or WORD signifies. Compare GLOSS.

MENTALISM — see RATIONALISM.

MERONYM — the part in a whole/part relationship, e.g., *room* is a meronym of *house* (a room is part of a house). Compare HOLONYM. Compare COMPONENTIAL.

METAPHOR [adj: **METAPHORIC(AL)**] — a FIGURE OF SPEECH that makes an implied comparison between things that are unrelated, as in *John is a pig at mealtime*. Compare SIMILE.

METER [adj: **METRIC(AL)**] — a pattern of STRESSED and UNSTRESSED SYLLABLES or LONG and SHORT SYLLABLES imparting a rhythm to a PHRASE, often a line in poetry. Meters are named for the number of feet (see FOOT) they contain: monometer (1), dimeter (2), trimeter (3), tetrameter (4), pentameter (5), hexameter (6), heptameter (7), octameter (8), and so on. See DACTYLIC HEXAMETER and IAMBIC PENTAMETER.

METATHESIS — the transposition of sounds in a word as in the change of Old English *brid* to Modern English *bird* or the pronunciation of *ask* as [æks]. Compare EPENTHESIS and PROTHESIS.

METONYMY — a FIGURE OF SPEECH in which one word is substituted for another word closely associated with it, as in *The pen is mightier than the sword* meaning ‘Reason is more effective than force.’

MID — a term usually applied to VOWELS articulated by raising the tongue to a position in the middle of the ORAL CAVITY as opposed to HIGH or LOW as in the articulation of [e], [ɔ], and [o]. Compare CENTRAL.

MIDDLE VOICE — an INFLECTION in VERBS, often formally identical with the PASSIVE, in which the action defined in the verb is performed with special reference to the SUBJECT, either REFLEXIVELY or for the subject’s own benefit or interest. For example, the Greek sentence *luômai* ‘I wash myself’ consists only of the verb STEM *luo-* and the FIRST PERSON SINGULAR middle inflection *-mai*. Technically, English lacks a middle voice as a verb inflection; however, SENTENCES like *This book reads easily* meaning ‘It is easy for me to read this book’ are commonly referred to as middle.

MINIMAL DISTANCE PRINCIPLE — the PRINCIPLE that in English the SUBJECT of a NON-FINITE VERB is the NOUN PHRASE that is closest to it. For example, in *Fred thinks that John wants to go*, the subject of *go* is *John*, while in *Fred thinks that John wants Bill to go*, the subject of *go* is *Bill*.

MINIMAL PAIR — a pair of words distinguished by one and only one sound such as [kɑrt] (*cart*) and [hɑrt] (*heart*) or [iðɔ] (*ether*) and [iðo] (*either*) or [tɪm] (*Tim*) and [tɪn] (*tin*).

MINIMALIST PROGRAM — a term used by Noam Chomsky to describe the current version of TRANSFORMATIONAL GRAMMAR. In the minimalist program, STRUCTURAL REPRESENTATIONS and DERIVATIONS are restricted to their simplest form and are driven by the MORPHOLOGICAL properties of the words involved. The effort, as in all sciences, is to describe and explain the largest body of DATA with the fewest PRINCIPLES. Also called “minimalism.”

MINUS SIGN — the symbol “-” used to indicate a negative value for any feature F, that is, the item marked [-F] lacks the feature F, e.g., [o] is [-HIGH]. Compare PLUS SIGN.

MODAL — a class of AUXILIARY VERBS expressing such ideas as possibility (*might*), ability (*can*), obligation (*should*), necessity (*must*), condition (*would*), permission (*may*), etc. which indicate a speaker’s attitude about something, e.g., *It might rain*, *I can do that*, and *You should honor your parents*.

MODAL LOGIC — the branch of LOGIC that classifies and formalizes PROPOSITIONS on the basis of their MODALITY and attempts to establish PRINCIPLES for their interpretation. For example, if a particular PROPOSITION is necessary (*They must agree*), then it should be possible (*They can agree*), if a particular proposition is impossible (*They can’t agree*), then it must be false (*They did not agree*), etc. See PROPOSITIONAL CALCULUS.

MODALITY — the general term for all the different ways in which a PROPOSITION can be expressed, such as whether it is expressed as a simple assertion or something more than a simple assertion, such as a denial, contingency, necessity, probability, possibility, impossibility, etc. The GRAMMATICAL systems involved with modality vary considerably even within any given language. For example, in English one can express necessity with a MODAL (*You must be fair*), probability with an ADVERB (*You are probably fair*), and an exhortation with a MODE (*Be fair*).

MODE (MOOD/MDE) — an INFLECTION in VERBS that refers to the distinction between INDICATIVE, CONDITIONAL, IMPERATIVE, etc.

MODIFICATION — a FUNCTIONAL relationship in which some word or PHRASE limits the meaning of the HEAD such as *loud* in *loud snoring* or *loudly* in *snore loudly* or *particularly* in *particularly loudly*. Typical MODIFIERS include ADJECTIVES, ADVERBS, PREPOSITIONAL PHRASES, and RELATIVE CLAUSES.

MODIFIER — a word, such as an ADJECTIVE or ADVERB, that limits the meaning of a HEAD, e.g., *expensive* in *an expensive suit* and *lavishly* in *Sue dress lavishly*.

MOOD — equivalent to MODE (MDE).

MORPHEME [adj: **MORPHEMIC**] — a minimal unit of distinctive meaning, that is, a meaningful sequence of sounds that is not divisible into smaller meaningful units, e.g., *ball*. It is important not to equate morphemes with either words or SYLLABLES; in both theory and practice, there is no necessary coincidence between a morpheme and either of these units. For example, the English NOUN *hands* is one word consisting of one syllable, but having two morphemes: *hand*, which defines a specific body part, and *s* which indicates PLURAL. Conversely, *finger* has two syllables but is only one morpheme. One cannot divide the word *finger* into smaller meaningful units: the sequences *fing*, *inger*, *ger*, etc. are all without content. Even the sequence *fin*, which does have meaning in English, is not part of the MORPHOLOGICAL structure of *finger*, because its meaning is unrelated to the meaning of the whole word.

MORPHEME BOUNDARY — see BOUNDARY SYMBOL.

MORPHOLOGICAL FEATURE — a FEATURE in MORPHOLOGY that refers to a morphological aspect of a class of words, e.g., [+NOMINAL], a feature of NOUNS meaning that they have inherent NUMBER, PERSON, GENDER and/or CASE.

MORPHOLOGICAL FEATURE OPPOSITION — see FEATURE.

MORPHOLOGY [adj: **MORPHOLOGICAL**]—the area of LINGUISTICS that studies the internal structure of WORDS, in particular the analysis of words as composed of various MORPHEMES such as ROOTS, STEMS, and AFFIXES.

MORPHOPHONEMIC RULE — a predictable variation in the pronunciation of a MORPHEME that reflects specific rules in the GRAMMAR of a language. For example, the PLURAL morpheme in English nouns is variously pronounced [ɹ] as in *busses*, [s] as in *bucks*, and [z] as in *bugs*. These variations are expressed in the following rules:

PL ÷ [ɹ] / [+SIBILANT] ____
 PL ÷ [s] / [-VOICED] ____
 PL ÷ [z] / [+VOICED] ____

See SLASH-DASH NOTATION.

MORPHOSYNTACTIC — combining the FEATURES of both MORPHOLOGY and SYNTAX. For example, the category NOUN is a morphosyntactic category since nouns are specified by both MORPHOLOGICAL FEATURES, e.g., they are marked for inherent NUMBER (singular or plural), and SYNTACTIC FEATURES, e.g., they function as SUBJECTS and OBJECTS.

MORPHOSYNTACTIC CATEGORY — a category such as NOUN or VERB distinguished by both MORPHOLOGICAL FEATURES and SYNTACTIC FEATURES.

MOVE-" — the TRANSFORMATIONAL RULE in recent work in TRANSFORMATIONAL GRAMMAR which allows any PHRASE to move anywhere. However, Move-" is tightly constrained by PRINCIPLES like SUBJACENCY.

MOVEMENT — a term used in TRANSFORMATIONAL GRAMMAR (TG) for the relocation of a syntactic unit to a different position, e.g., the movement of *On Saturdays* from final position in *Mary cleans house on Saturdays* to initial position in *On Saturdays, Mary cleans house*. Compare PLACEMENT.

MULTILINGUAL — having many languages.

MULTIPLE BRANCHING CONSTRUCTION — a CONSTRUCTION with no internal dependency relationships. Multiple branching constructions simply involve a string of connected

elements as in *Mary woke up early, had a cup of coffee and two pieces of toast, made the children's lunches, did a load of laundry, and drove to work.* Compare LEFT BRANCHING CONSTRUCTION, RIGHT BRANCHING CONSTRUCTION, NESTED CONSTRUCTION, and CENTER EMBEDDED CONSTRUCTION.

NARROWING — a specialization in the meaning of a word. For example, *liquor* was once a SYNONYM for *liquid*; today, it only means alcoholic liquid. Compare BROADENING.

NASAL — involving the NASAL CAVITY. Opposed to ORAL.

NASAL ([+NASAL]) versus **NONNASAL** ([-NASAL]) — a PHONETIC FEATURE OPPOSITION. Nasal sounds are produced with a lowered VELUM that allows the air to escape through the nose as in the sounds [m], [n], and [ŋ]; nonnasal sounds are produced with a raised velum so that the air from the lungs can escape only through the mouth as in [p], [g], [r], [w], [a], etc.

NASAL CAVITY — the air passage from the nostrils to the PHARYNX. See Figure One on Page 15. See also VOCAL TRACT.

NATIVE LANGUAGE — the language or languages one learns as a child.

NATIVE LANGUAGE ACQUISITION — the acquisition of a NATIVE LANGUAGE. Also called “L1 acquisition.”

NATIVE SPEAKER — one who learns a language from earliest childhood.

NATIVE WORD — a word whose history or ETYMOLOGY can be traced back to the earliest stages of the language, e.g., *break, house, wife*, etc. Same as INHERITED WORD. Compare BORROWED WORD and LEARNED WORD.

NATIVISM — see RATIONALISM.

NATURAL CLASS — a class that shares the same set of FEATURES.

NATURAL LANGUAGE — a LANGUAGE that occurs naturally like English or Chinese as opposed to one which is deliberately made up like Esperanto or Klingon. Compare ARTIFICIAL LANGUAGE.

NATURE versus **NURTURE** — a distinction that refers to the development of a organism, in particular, whether the organism acquires some knowledge, skill or behavior as a result of mechanisms that are inborn (by nature) or learned (by nurture). See RATIONALISM and EMPIRICISM.

NEGATOR — a word or PHRASE which negates, e.g., *not* in *She did not go*.

NEGATION — a linguistic or logical operation which has the effect of making something negative. In language, negation can be expressed by a NEGATOR like *not*, a PREFIX like *un-*, a SUFFIX like

–less, by a word with negative meaning, and a wide variety of other means: *John has no fears, John doesn't have any fears, John is never afraid, John is always unafraid, John is fearless, John lacks fear*, etc. See PROPOSITIONAL CALCULUS.

NEIGHBORHOOD — a FUNCTIONAL unit of SYNTAX consisting minimally of two elements: a V0 or N0 HEAD and a BINDING RESIDENT (BR). All phrases C-COMMANDED by one and the same BR are in the same neighborhood. Compare CLAUSE.

NEOLOGISM — a newly coined word, expression, or usage, e.g., *consense* meaning ‘reach a consensus’ as in *Let's try to consense about the appropriate strategy*.

NESTED CONSTRUCTION — a CONSTRUCTION in which one CONSTITUENT is totally contained inside of another constituent. For example, *a man that she had once dated* forms a nested construction with *call up* in *Mary called a man that she had once dated up*. Compare MULTIPLE BRANCHING CONSTRUCTION, LEFT BRANCHING CONSTRUCTION, RIGHT BRANCHING CONSTRUCTION, and CENTER EMBEDDED CONSTRUCTION.

NEUROLINGUISTICS [adj: **NEUROLINGUISTIC**] — the branch of linguistics concerned with the neurology of language, especially, the neurological processes involved in language development and use, the representation of language in the brain, impairments in language ability as a result of brain injury, and the relationship between language and other cognitive abilities.

NEUTER (NEUT) — see GENDER.

NODE — see TREE DIAGRAM and SEMANTIC NETWORK.

NOMINAL — pertaining to a NOUN.

NOMINAL ([+NML]) versus **NONNOMINAL ([–NML])** — a MORPHOLOGICAL FEATURE OPPOSITION distinguishing a MORPHOSYNTACTIC CATEGORY that has inherent distinctions in NUMBER, PERSON, GENDER and/or CASE, such as the category NOUN ([+NML]), from one which is not, such as the category VERB ([–NML]).

NOMINAL CLAUSE — equivalent to NOUN CLAUSE.

NOMINALIZATION — a NOUN PHRASE derived from a CATEGORY which is not a NOUN, e.g., the VERB *destroy* is nominalized as *destruction*, the ADJECTIVE *eager* is nominalized as *eagerness*, etc. An entire SENTENCE can be nominalized as in *the barbarians' sudden destruction of the city* or *John's inexplicable eagerness to please*.

NOMINATIVE CASE (NOM) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the subject of a VERB, e.g., *he* in *He called me*. Compare ACCUSATIVE.

NONACCIDENTAL GAP — see ACCIDENTAL GAP versus NONACCIDENTAL GAP.

NONANTERIOR ([–ANT]) — see ANTERIOR versus NONANTERIOR.

NONARBITRARY — see ARBITRARY versus NONARBITRARY.

NONASSOCIATIVE (NASC) — the THEMATIC RELATION indicating the ALIENABLE entity or attribute that someone or something lacks, e.g., *penniless* in *Spendthrifts are often penniless*. See ASSOCIATIVE.

NONATTRIBUTIVE (NATT) — the THEMATIC RELATION indicating the INALIENABLE entity or attribute that someone or something lacks, e.g., *fearless* in *Skydivers are fearless*. See ATTRIBUTIVE.

NONBACK ([–BACK]) — see BACK versus NONBACK.

NONCIRCUMSTANTIAL (NCIR) — the THEMATIC RELATION indicating the circumstances without which something is done, e.g., *without exaggeration* as in *She acted the part without exaggeration*. See CIRCUMSTANTIAL.

NONCOMITATIVE (NCOM) — the THEMATIC RELATION indicating the person or thing without which something is done, e.g., *without Sue* in *He came without Sue*. See COMITATIVE.

NONCOMPARATIVE (NCPR) — the THEMATIC RELATION expressing the object of a difference, e.g., *unlike anyone I know* in *John is unlike anyone I know*. See COMPARATIVE.

NONCONJUNCTURAL ([–CNJ]) — see CONJUNCTURAL versus NONCONJUNCTURAL.

NONCONTINUANT ([–CONT]) — see CONTINUANT versus NONCONTINUANT.

NONCORONAL ([–COR]) — CORONAL versus NONCORONAL.

NONDIMENSIONAL — see DIMENSIONAL versus NONDIMENSIONAL.

NONDISJUNCTURAL ([–DSJ]) — see DISJUNCTURAL versus NONDISJUNCTURAL.

NONDISTINCTIVE FEATURE — see DISTINCTIVE FEATURE.

NONEXTENSIONAL ([–EXT]) — see EXTENSIONAL versus NONEXTENSIONAL.

NONFACTIVE — see FACTIVE versus NONFACTIVE.

NONFINITE VERB — see FINITE VERB versus NONFINITE VERB.

NONFIRST ORDER ([–FST]) — see FIRST ORDER versus NONFIRST ORDER.

NONHIGH ([–HIGH]) — see HIGH versus NONHIGH.

NONINSTRUMENTAL (NINS) — the THEMATIC RELATION indicating the instrument without which something is done, e.g., *with a score* in *Toscanini conducted the opera without a score*. See INSTRUMENTAL.

NONLIMBIC — see LIMBIC versus NONLIMBIC.

NONLOW ([–LOW]) — see LOW versus NONLOW.

NONNASAL ([–NASAL]) — see NASAL versus NONNASAL.

NONPOSITIONAL — see POSITIONAL versus NONPOSITIONAL.

NONPROXIMAL ([–PRX]) — see PROXIMAL versus NONPROXIMAL.

NONRESTRICTIVE CLAUSE — a CLAUSE which does not restrict the meaning of the HEAD it modifies but stands in APPOSITION to it, e.g., *Sardinia, which/*that is located in the Mediterranean, is a lovely island to visit*. Compare RESTRICTIVE CLAUSE.

NONROUND ([–ROUND]) — see ROUND versus NONROUND.

NONSIBILANT ([–SIBILANT]) — see SIBILANT versus NONSIBILANT.

NONSONORANT ([–SONORANT]) — see SONORANT versus NONSONORANT (OBSTRUENT).

NONSTATIVE — relations that indicate motion. See STATIVE.

NONTEMPORAL — see TEMPORAL versus NONTEMPORAL.

NONTENSE ([–TENSE]) — see TENSE versus NONTENSE.

NONTRANSFORMATIONAL GRAMMAR (NTG) — a GRAMMATICAL model that does not contain TRANSFORMATIONAL RULES like MOVEMENT and DELETION, but does contain SYNTACTIC processes like PLACEMENT and OMISSION.

NONVOICED ([–VOICED]) — see VOICED versus NONVOICED.

NOUN (N) — a SYNTACTIC CATEGORY of words that is identifiable on the basis of several criteria. Nouns often exhibit INFLECTIONAL distinctions like CASE (*boy* versus *boy's*) and NUMBER (*boy* versus *boys*). Nouns also fulfill specific GRAMMATICAL RELATIONS like SUBJECT (*The boy went*) and DIRECT OBJECT (*Call the boy*).

NOUN CLAUSE — a CLAUSE which functions like a NOUN, e.g., *what she said* in *He believes what she said*. Same as NOMINAL CLAUSE. See COMPLEMENTATION.

NOUN PHRASE (NP) — a PHRASE whose HEAD is a NOUN, e.g., the NP *John's total dependence on his parents* contains the noun *dependence* as its head.

NUCLEUS — See SYLLABLE.

NUMBER (NUM) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) and VERBS that refers to the distinction between SINGULAR, e.g., *the house IS big*, and PLURAL, e.g., *the houses ARE big*. Some languages contain a DUAL number (for two things) and a TRIAL number (for three things).

NUMBER SIGN — the symbol “#” used in phonology to indicate a word boundary. The notation “#___” means ‘at the beginning of a word’; “___#” means ‘at the end of a word.’ See SLASH-DASH NOTATION and BOUNDARY.

NUMERAL — a word referring to a cardinal number (one, two, three, etc) or an ordinal number (first, second, third, etc.).

NURTURISM — see EMPIRICISM.

OBJECT [adj: **OBJECTIVE**] — the PRIMARY COMPLEMENT of a VERB or PREPOSITION, e.g., *him* in *They consider him smart* and *They believe in him*.

OBJECT COMPLEMENT — (i) a CLAUSE EMBEDDED as a DIRECT OBJECT, e.g., *(that) John left* in *Mary thinks (that) John left*; or (ii) a PHRASE following a DIRECT OBJECT and referring to it, e.g., *president* in *They elected John president*.

OBJECT COMPLEMENTATION — the EMBEDDING of a CLAUSE in DIRECT OBJECT position, e.g., *(that) John left* in *Mary thinks (that) John left*.

OBJECTIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the DIRECT OBJECT of a VERB (*him* in *She saw him*) or the OBJECT of a PREPOSITION (*her* in *He gave it to her*). Often called ACCUSATIVE CASE. Compare NOMINATIVE.

OBSERVATIONAL ADEQUACY — the level of adequacy attained in GRAMMATICAL CHARACTERIZATION when the facts are noted. See LEVELS OF ADEQUACY.

OBSTRUENT — sounds produced with a VOCAL TRACT constriction that impedes the airflow out the mouth so that sustained VOICING is not possible, such as STOPS, FRICATIVES and AFFRICATES. See SONORANT versus NONSONORANT.

OCCIPITAL LOBE — that portion of the CEREBRAL CORTEX that is concerned with the interpretation of visual stimuli including the naming and function of objects seen. See Figure Six on Page 26.

OMISSION — a term used in NONTRANSFORMATIONAL GRAMMAR(NTG) for leaving a syntactic unit out of a SENTENCE, e.g., the omission of *cleans house* in the second clause of *Mary cleans house on Saturdays, and Sue, on Sundays*. Compare DELETION.

ONOMATOPOEIA — a FIGURE OF SPEECH in which a PHRASE is intended to sound like what it means, e.g., *the buzzing of busy bees*.

ONSET — See SYLLABLE.

ONTOGENY — the entire course of development of an individual organism. Compare PHYLOGENY.

OPEN CLASS ([+OPN]) versus **CLOSED CLASS ([−OPN])** — a MORPHOLOGICAL FEATURE OPPOSITION distinguishing MORPHOSYNTACTIC CATEGORIES which have a potentially unlimited number of items ([+OPN]), such as NOUN and VERB, from those with a relatively small and fixed number of items ([−OPN]), such as PREPOSITION and CONJUNCTION. One can always add a new noun to a language, whereas the addition of a conjunction is very uncommon.

OPTIONAL ELEMENT — an element that is optional such as the COMPLEMENTIZER that in *John thinks (that) Mary will win*. In PHRASE STRUCTURE RULES and PHONOLOGICAL RULES, an optional element is enclosed in PARENTHESES.

ORAL — involving the mouth. Opposed to NASAL.

ORAL CAVITY — the air passage from the lips to the PHARYNX. See VOCAL TRACT.

ORDINAL NUMBER — see NUMERAL.

ORIGINATIVE (ORG) — the THEMATIC RELATION expressing the entity or condition from which something is transformed, e.g., *out of debt* in *John got himself out of debt*. Related to ALIENABLE POSSESSION. Compare COMPOSITIONAL, RESULTATIVE, and TERMINATIVE.

ORTHOGRAPHY — the standard system of WRITING for a particular language or languages often including spelling and punctuation.

OVERGENERALIZATION — see ANALOGY.

OVERLAPPING DISTRIBUTION — in PHONOLOGY, a distribution of two or more sounds such that each can occur in exactly the same position of a word as the others. For example, in English, the sounds [p], [t], and [k] occur in overlapping distribution in *pin*, *tin* and *kin* as well as *nap*, *gnat*,

and *nack* (the reference is always to sound, never to spelling). Sounds in overlapping distribution are the PHONEMES of a language. Compare COMPLEMENTARY DISTRIBUTION.

OVERTONE — see FREQUENCY.

PALATAL — formed by a constriction against the PALATE.

PALATE — the roof of the mouth separating the NASAL CAVITY and the ORAL CAVITY. See Figure One on Page 15.

PARADIGM [adj: **PARADIGMATIC**] — generally, a model; specifically, a list of the INFLECTIONS given for one member of a CATEGORY which serves as a model for other members of the same category. For examples, regular VERBS in English have the following endings: $-\emptyset$, $-s$, $-ed$, $-ing$ as in *play, plays, played, playing*. This example is a paradigm for the forms of all regular verbs, e.g., *roam, call, inflect, circumvent*, etc.

PARADIGMATIC — see SYNTAGMATIC RELATION versus PARADIGMATIC RELATION.

PARENT — see DAUGHTER versus PARENT.

PARAGRAPH — a series of sentences, normally marked off with an indent of the first line, all of which are on a single idea or topic.

PARALANGUAGE — another name for BODY LANGUAGE.

PARALINGUISTICS [adj: **PARALINGUISTIC**] — the branch of linguistics that focuses on BODY LANGUAGE.

PARAPHRASE — an alternative way of saying something, specifically, two or more different sequences of sounds with the same or nearly the same meaning, e.g., *a teacher of history* and *a history teacher*.

PARENT — see DAUGHTER versus PARENT.

PARENTHESSES — symbols used in PHRASE STRUCTURE RULES to indicate OPTIONAL ELEMENTS. For example, the following rule says that a NOUN PHRASE consists of an optional DETERMINER followed by a NOUN: NP \div (DET) + N.

PARIETAL LOBE — that portion of the CEREBRAL CORTEX concerned with the perception and identification of objects by touch. See Figure Six on Page 26.

PARSE — to analyze and identify the parts of a SENTENCE and assign them an appropriate grammatical structure. For example, in parsing *John hit the ball*, one notes that *ball* is the HEAD of a NOUN PHRASE functioning as the DIRECT OBJECT of the TRANSITIVE VERB *hit*.

PARSER — a computer program that can analyze and identify the parts of a SENTENCE and assign them an appropriate grammatical structure

PART OF SPEECH — a SYNTACTIC CATEGORY. TRADITIONAL GRAMMARS generally list seven parts of speech: NOUN, PRONOUN, VERB, ADJECTIVE, ADVERB, PREPOSITION, CONJUNCTION, and INTERJECTION.

PARTICIPLE — a VERBAL ADJECTIVE, that is, a VERB form functioning like an ADJECTIVE, e.g., *sleeping in the sleeping baby* or *The baby is in the crib sleeping and murdered in a murdered man* or *The man was found murdered*.

PARTICLE — (i) a term used for a form which is not easily classified as one of the traditional PARTS OF SPEECH, e.g., the word *on* in *The night wore on* or *to* in *I want to go*; (ii) an intransitive preposition such as *out* in *He threw out the garbage* and *He threw the garbage out*.

PARTITIVE CASE — (i) an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express a part or amount of some whole. For example, in the Finnish phrase *litra maitoa* ‘a liter of milk,’ *maitoa* (‘of milk’) is in the partitive case; (ii) any expression, such as a PREPOSITIONAL PHRASE, which serves a similar purpose, e.g., French *peu de gens* ‘few (of) the people.’

PASSIVE PARTICIPLE (PSVP) — a PARTICIPLE that is PASSIVE in meaning, such as *finished* in *The job has been finished*.

PASSIVE VOICE — an INFLECTION in VERBS in which the SUBJECT is viewed as undergoing the action it defines, e.g., *the tigers were killed by John*, as opposed to the ACTIVE VOICE in which the subject is viewed as performing the action, e.g., *John killed the tigers*.

PAST TENSE (PST) — a TENSE referring to past time, e.g., the suffix [t] in [w]kt] (*walked*), [d] in [h gd] (*hugged*), [ɔ] in [h ntɔ] (*hunted*), etc.

PATIENT — a broad term used for any THEMATIC RELATION that usually fills the DIRECT OBJECT position of a VERB such as *the key* in *The janitor inserted the key into the lock*. Compare AFFECTIVE and ASSOCIATIVE.

PENULT — the next to the last SYLLABLE, e.g., the syllable *-like-* in *unlikely*.

PERFECTIVE ASPECT — the ASPECT used to indicate that an action is completed as in *He has written to her*. Compare PROGRESSIVE ASPECT.

PERFECTIVE PARTICIPLE (PFCP) — a PARTICIPLE that is PERFECTIVE in meaning, such as *finished* in *She has finished the job*. Compare PROGRESSIVE PARTICIPLE.

PERFORMATIVE UTTERANCE versus **CONSTATIVE UTTERANCE** — A performative utterance is one that performs an act by virtue of the fact that it has been uttered. For example, if

someone says *I promise to clean the garage*, then that person has made a promise. A constative utterance does not perform an act, but merely states whether something is true or false, e.g., utterances like *The earth is round* and *The moon is not made of cheese*. When a performative utterance contains a performative VERB like *promise, declare, deny, warn*, etc., then it is called an explicit performative; when it does not contain a performative verb but still performs an act, it is called an implicit performative. The utterance *I warn you not to steal* is an explicit warning, while *This store is protected by electronic surveillance* is an implicit warning.

PERIPHRAISIS [adj: **PERIPHRASTIC**]—the use of longer phrases for possibly shorter ones, e.g., saying *the people who live next door to me* rather than *my neighbors*.

PERLOCUTIONARY ACT — see SPEECH ACT THEORY.

PERMANENT RESIDENT — an obligatory, non-omissible RESIDENT.

PERSON (PER) — an INFLECTION in PRONOUNS and VERBS that refers to the three-way distinction between the speaker (FIRST PERSON), e.g., *I am tall*, the hearer (SECOND PERSON), e.g., *You are tall*, and someone or something else (THIRD PERSON), e.g., *He (she, it) is tall*.

PERSONAL PRONOUN — a PRONOUN that refers to the speaker, the hearer, or the person or thing spoken about, e.g., *I, me, you*, and *him*.

PERSONIFICATION — a FIGURE OF SPEECH in which human characteristics are given to inanimate objects or ideas, as in *Love is the coldest of critics* (George William Curtis) or *Nothin' says lovin' like somethin' from the oven, and Pillsbury says it best* (TV commercial).

PHARYNGEAL — involving the PHARYNX.

PHARYNX — the area of the throat above the LARYNX. See Figure One on Page 15.

PHI — the symbol “Ø” indicating the deletion of an element in a PHONOLOGICAL RULE. See SLASH-DASH NOTATION.

PHI DETERMINER — the symbol “Ø” indicating the phonologically null DETERMINER in SYNTACTIC REPRESENTATIONS, e.g., *He has Ø money* versus *He has the money*.

PHONE [adj: **PHONIC**] — an individual sound as it occurs in SPEECH. Compare ALLOPHONE.

PHONATION — the production of VOICED sound by vibration of the VOCAL CORDS.

PHONEME [adj: **PHONEMIC**]— a distinctive sound in a language, e.g., one that occurs in OVERLAPPING DISTRIBUTION such as the vowels in *beat, bit, bait, bet, bat, boot, boat, bought*, and *but*. Compare ALLOPHONE.

PHONEMIC FORM — the form of a word or phrase in PHONEMIC TRANSCRIPTION.

PHONEMIC TRANSCRIPTION versus **PHONETIC TRANSCRIPTION**— a phonemic transcription is a representation of the distinctive sounds in a word or phrase enclosed in SLASHES. For example, the phonemic transcription of the word *pin* is /p^w. Each of the sounds in /p^w is distinctive (a separate PHONEME in English). A phonetic transcription is a representation of the exact phonetic shape of the sounds in a word or phrase enclosed in SQUARE BRACKETS. For example, the phonetic transcription of the word *pin* is [p^hw]. The first symbol in [p^hw], the ASPIRATED [p^h], is a nondistinctive sound in English; in particular, the aspiration is predictable: VOICELESS STOPS ([p], [t], and [k]) are unaspirated after [s], and aspirated elsewhere. Since the variation is predictable and nondistinctive, it is not included in the phonemic transcription. See ALLOPHONE.

PHONETIC FEATURE — a FEATURE in PHONETICS and PHONOLOGY which is defined in terms of the human ARTICULATORY APPARATUS and used to define NATURAL CLASSES of speech sounds.

PHONETIC FEATURE OPPOSITION — see FEATURE.

PHONETIC FORM — (i) the form of a word or PHRASE in PHONETIC TRANSCRIPTION; (ii) one of the two interpretative components in a TRANSFORMATIONAL GRAMMAR which contains the representation of SENTENCES at the PHONETIC level (usually abbreviated as PF). Compare LOGICAL FORM (LF).

PHONETIC TRANSCRIPTION — see PHONEMIC TRANSCRIPTION.

PHONETICIAN — one who studies the sounds of human languages.

PHONETICS [adj: **PHONETIC**] — one of two branches of GRAMMAR dealing with the sounds of human languages. Phonetics is concerned with how the speech sound is produced, transmitted, and perceived. See PHONOLOGY.

PHONOLOGIST — a person who studies PHONOLOGY.

PHONOLOGICAL FEATURE — a FEATURE that refers to sound, e.g., CONSONANTAL and VOCALIC.

PHONOLOGICAL RULE — a rule that expresses a relationship between sounds, often a relationship between a PHONEME and its ALLOPHONES. For example, in English, VOICELESS STOPS become UNASPIRATED after [s], a fact that is expressed in the following rule:

$$[+STOP, -VOICED] \div [-ASPIRATED] / [s] \text{ —}$$

See SLASH-DASH NOTATION.

PHONOLOGY [adj: **PHONOLOGICAL**]— one of two branches of GRAMMAR dealing with the sounds of human languages. Phonology is concerned with the organization of speech sounds into sound systems. See PHONETICS.

PHONOTACTIC RULE — a rule concerned with the sequential arrangement of sounds in larger units, e.g., the rule stipulating that an English word can contain two NASAL CONSONANTS but cannot end in two nasal consonants: the word *column* is pronounced [kalɔn] not *[kalumn], whereas the word *columnist* is pronounced [kalɔnnw]. The relationship between *column* and *columnist* is expressed in the following PHONOTACTIC RULE, which employs the same SLASH-DASH NOTATION used in all PHONOLOGICAL RULE:

$$[+\text{CONSONANT}, +\text{NASAL}] \div \emptyset / [+\text{CONSONANT}, +\text{NASAL}] ___ \#$$

This rule will change the PHONEMIC representation of *column* /kalɔnn/ into the PHONETIC form [kalɔn] by deleting the *n* because it follows a nasal consonant at the end of a word. On the other hand, since the phonemic representation of *columnist* /kalɔnn+w/ does not end in two nasal consonants, the rule does not apply and the phonetic form [kalɔnnw] contains both nasal consonants.

PHONOTACTICS — the sequential arrangement of sounds in larger units. See PHONOTACTIC RULE.

PHRASAL VERB — a VERB consisting of more than one word, e.g., *throw out*, *put up with*, *give in to*, etc.

PHRASE [adj: **PHRASAL**]— a phrase is any group of words that serves as a unit within a CLAUSE. Phrases are usually named for their most distinctive element, called the HEAD, e.g., NOUN PHRASE (NP), VERB PHRASE (VP), PREPOSITIONAL PHRASE (PP), ADJECTIVE PHRASE (AP), and so on. Phrases are identified by one or more of three SYNTACTIC processes: PLACEMENT, OMISSION, and REFERENCE. For example, the words *off the road* form a phrase in *The truck driver suddenly turned off the road* because, among other things, it is possible to ask a question like *Off which road did the truck driver suddenly turn?* On the other hand, *off the radio* does not form a phrase in *The truck driver suddenly turned off the radio* because, among other things, it is not possible to ask a question like **Off which radio did the truck driver suddenly turn?*

PHRASE MARKER — the STRUCTURAL REPRESENTATION of a SENTENCE in terms of LABELED BRACKETS or, equivalently, a TREE DIAGRAM.

PHRASE STRUCTURE — the internal structure of a PHRASE, e.g., the NOUN PHRASE (NP), *that book*, consists of the DETERMINER *that* and the NOUN *book*.

PHRASE STRUCTURE RULE (PS-RULE) — a rule involved in the generation of the SYNTACTIC STRUCTURE of SENTENCES. For example, English CLAUSES are often described as consisting of three elements: a NOUN PHRASE (NP) which functions as the SUBJECT, an AUXILIARY

element like the MODAL *will*, and a VERB PHRASE (VP). This structure is captured in the following phrase structure rule, which says that the symbol “S” becomes (or should be rewritten as) the string of symbols “NP + AUX + VP”:

$$S \div NP + AUX + VP$$

PHYLOGENY — the evolutionary history of a species. Compare ONTOGENY.

PICTOGRAM — a symbol which directly represents an object, such as **★** to represent a star or **☺** to represent a smiley face. Some of the earliest writing systems such as Egyptian HIEROGLYPHICS contained pictograms. Compare IDEOGRAM.

PIDGIN — a pidgin (pronounced [pɪdʒɪn] just like *pigeon*) is a language that develops from two separate languages and combines features of each. Generally, a pidgin arises when speakers of different languages have a great deal of contact with each other and need a common language to communicate with each other. The formation of a pidgin and the transformation of a pidgin into a CREOLE is a gradual process. It often begins when a selected vocabulary is BORROWED from one language into another. When the number of words and constructions increases significantly, a new language, the pidgin, is formed. When that pidgin is learned as a native language by children, it is called a creole.

PITCH — the relative tone at which sound segments are produced. See INTONATION.

PLACE OF ARTICULATION — the position in the VOCAL APPARATUS where a sound is made such as ALVEOLAR (at the ALVEOLAR RIDGE) or VELAR (at the VELUM). See MANNER OF ARTICULATION.

PLACEMENT — a term used in NONTRANSFORMATIONAL GRAMMAR (NTG) for the occurrence of a syntactic unit in different positions, e.g., the occurrence of *on Saturdays* in either SENTENCE initial position as in *On Saturdays, Mary cleans house* or sentence final position as in *Mary cleans house on Saturdays*. Compare MOVEMENT.

PLURAL NUMBER (PL) — see NUMBER.

PLUS SIGN — the symbol “+” which has a variety of uses in LINGUISTICS: (i) It is used to indicate a positive value for any feature F, that is, the item marked [+F] has the feature F, e.g., [u] is [+HIGH]. Compare MINUS SIGN. (ii) It is used to indicate concatenated elements in a syntactic rule or representation like NP + AUX + VP. See PHRASE STRUCTURE RULE. (iii) It is used to indicate a MORPHEME boundary as in [rod+we] (*roadway*). See BOUNDARY SYMBOL.

POLYGLOT — a person who speaks many languages.

POLYSEMY [adj: **POLYSEMOUS**] — the association of one lexical item with a range of different meanings, such as *rich* meaning ‘wealthy,’ ‘vivid,’ ‘productive,’ ‘fatty,’ etc.

POLYSYNTHETIC LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of long strings of STEMS and AFFIXES, which may translate as an entire English SENTENCE. American Indian languages are polysynthetic. See Figure Two II on Page 17.

POSITIONAL ([–PST]) versus **NONPOSITIONAL** ([–PST]) — a SEMANTIC FEATURE OPPOSITION that distinguishes THEMATIC RELATIONS which refer to a location in space or time ([+PST]) such as LOCATIVE (*in the room*), ALLATIVE (*to New York*), ABLATIVE (*since Wednesday*), etc., from those which do not ([–PST]) such as AFFERENTIAL (*to her* in *I sold it to her*) and EFFERENTIAL (*from her* in *I bought it from her*).

POSITIVE DEGREE — a degree of MODIFICATION in ADJECTIVES and ADVERBS used when no comparison is involved (*John is tall*; *John ran quickly*). See COMPARATIVE DEGREE and SUPERLATIVE DEGREE.

POSSESSIVE CASE (POS) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the possessor, e.g., *John's* in *John's book*. Also called “genitive case.”

POSSESSIVE PRONOUN — a PRONOUN that takes the place of possessive NOUN PHRASES, e.g., *her*, *his*, and *its*.

POSTHEAD ([+PSH]) versus **NONPOSTHEAD** ([–PSH]) — a SYNTACTIC FEATURE OPPOSITION referring to the position of a phrasal element after the HEAD. See LINEAR FEATURE.

POSTPOSITION — Compare PREPOSITION.

PRAGMATICS [adj: **PRAGMATIC**] — the study of the relationship between sentences and the context in which they occur.

PRECEDENCE — a FORMAL linear relationship between SYNTACTIC units in PHRASE STRUCTURE. A NODE " precedes a NODE \$ if it occurs before it. See TREE DIAGRAM.

PREDICATE — a term used in TRADITIONAL GRAMMAR for a unit that specifies what is asserted of the topic, e.g., *will go to the party* in *John will go to the party*. In LOGIC, a predicate is that part of a PROPOSITION which names the ASSERTION made in relation to an ARGUMENT or ARGUMENTS. For example, in the PROPOSITION *The hunter killed the tigers*, *hunter* and *tigers* are ARGUMENTS and *killed* is the predicate.

PREDICATE ADJECTIVE — an ADJECTIVE PHRASE (AP) that occurs in a PREDICATE and refers back to the SUBJECT of a SENTENCE, e.g., *very tall* in *John is very tall*.

PREDICATE CALCULUS — a formal system used by logicians and linguists to represent the internal structure of PROPOSITIONS such as the difference in meaning between *Some men are*

rational and *All men are rational* or *John went home*, *John did not go home*, and *John should go home*. See PROPOSITIONAL CALCULUS, QUANTIFICATION and MODAL LOGIC.

PREDICATE NOMINATIVE — a NOUN PHRASE (NP) that occurs in a PREDICATE and refers back to the SUBJECT of a SENTENCE, e.g., *the captain of the team* in *John is the captain of the team*.

PREDICATION — instantiating an idea as a PREDICATE.

PREDICATIVE POSITION — the position, usually of ADJECTIVES, when they are POSTHEAD MODIFIERS, e.g., *tall* in *a man that tall* or *The man is tall*, as opposed to ATTRIBUTIVE POSITION, when they are PREHEAD MODIFIERS of NOUNS, e.g., *tall* in *a tall man*.

PREFIX — an AFFIX that occurs before a ROOT or STEM, e.g., *un-* in *unlikely*. Compare SUFFIX

PREHEAD ([+PRH]) versus **NONPREHEAD** ([-PRH]) — a SYNTACTIC FEATURE OPPOSITION referring to the position of a phrasal element before the HEAD. See LINEAR FEATURE.

PREPOSITION (P) [adj: **PREPOSITIONAL**] — A preposition is a word that typically introduces a NOUN PHRASE and serves as an ADVERBIAL or ADJECTIVAL MODIFIER, e.g., *into* in *John ran into the yard*, and *near* in *John is near the fence*. Compare POSTPOSITION.

PREPOSITIONAL PHRASE (PP) — a PHRASE whose HEAD is a PREPOSITION, e.g., the PP *directly into the room* contains the preposition *into* as its head.

PRESCRIPTIVE GRAMMAR — GRAMMAR which includes value judgments that prescribe what people should say.

PRESENT TENSE (PRS) — a TENSE referring to present time, e.g., the suffix [s] in [w]ks] (*walks*), [z] in [h gz] (*hugs*), [ɪ] in [kɪz] (*kisses*), etc.

PRESUPPOSITION — (i) information assumed by a speaker or writer to be known by the person(s) being addressed. For example, the question *When is Sue leaving for Paris* presupposes that both the speaker and the hearer know who Sue is and that Sue intends to leave for Paris. (ii) information that is assumed for the appropriate use of individual words. For example, the verb *criticize* in *Mary criticized John* presupposes that whatever John did was bad, while the verb *praise* in *Mary praised John* presupposes that whatever John did was good. See FACTIVE versus NONFACTIVE and ENTAILMENT versus PRESUPPOSITION.

PRIMARY COMPLEMENT (PCOMP) — the COMPLEMENT that is adjacent to the VERB which GOVERNS it, e.g. in *She gave the book to him*, *the book* is the primary complement and *to him* is the SECONDARY COMPLEMENT.

PRIMITIVE — something that is not derived, but assumed to be basic. For example, the sounds of all human languages are described in terms of a finite set of PHONETIC FEATURE OPPOSITIONS like [±VOICED] and [±NASAL], which cannot be broken down into smaller elements.

PRINCIPLE — a fundamental and comprehensive rule to describe some natural phenomenon. See HYPOTHESIS.

PRO — an empty pronominal in TRANSFORMATIONAL GRAMMAR, typically representing the SUBJECT of an INFINITIVE as in *John asked Bill what PRO to do* and *John told Bill what PRO to do*. In the first example, *PRO* refers to *John*; in the second, to *Bill*. The theory which describes the particular conditions that determine the choices for the REFERENT of PRO is called *control theory*.

PROCLITIC — see CLITIC.

PROFILE — a term used in COGNITIVE GRAMMAR to describe the entity in some scene which is made most prominent in a SENTENCE describing that scene. For example, suppose a scene involves an individual named Floyd who used a hammer to break a glass. Any given sentence may permit a number of profiling options. For example, the entire ACTION CHAIN is profiled in *Floyd broke the glass with the hammer*. In *The hammer broke the glass*, only the hammer–glass interaction is profiled; in *The glass broke easily*, the profile only involves the change–of–state process undergone by the glass.

PRO–FORM — any element that is bound to another PHRASE, e.g., *himself* in *John takes good care of himself* and *does so* in *Mary cleans house on Saturdays, and Sue does so on Sundays*.

PROGRAMMING LANGUAGE — a FORMAL language in which a computer program is written.

PROGRESSIVE ASPECT — the ASPECT used to indicate that an action is continuous as in *He is writing to her*. Compare PERFECTIVE ASPECT.

PROGRESSIVE PARTICIPLE (PRGP) — a PARTICIPLE that is PROGRESSIVE in meaning, such as *finishing* in *She is finishing the job*. Compare PERFECTIVE PARTICIPLE.

PRONOUN (PRO) [adj: PRONOMINAL] — A pronoun is a word that is used in place of a NOUN PHRASE, e.g., *he, she, who, myself*, etc.

PROPER NOUN — a NOUN that refers to specific individuals, places, or things, e.g., *John, Rome*, and *English*; a COMMON NOUN is non–specific in reference, e.g., *man, city*, and *language*.

PROPOSITION [adj: PROPOSITIONAL] — the essential meaning of a statement in the form of a simple DECLARATIVE SENTENCE or in terms of a PREDICATE and ARGUMENTS. For example, the proposition *John admires Bill* contains the predicate *admire* and the arguments *John* (the SUBJECT) and *Bill* (the DIRECT OBJECT). This proposition is also contained in *John must admire Bill, John*

surely admires Bill, John admires only Bill, John would admire Bill if he weren't so jealous of him, etc.

PROPOSITIONAL CALCULUS — a formal system used by logicians and linguists to state PROPOSITIONS and to express the relationship between propositions. For example, if some proposition *p* is true (T), e.g., *A stop is a consonant*, then the negative of that proposition must be false (F). Similarly, if *p* is false, e.g., *A stop is a nonconsonant*, then the negative of *p* must be true. Logicians express these relationships in truth-tables like the following where “~” denotes NEGATION:

p	~p
T (a stop is a consonant)	F (a stop is not a consonant)
F (a stop is a nonconsonant)	T (a stop is not a nonconsonant)

See MODAL LOGIC and QUANTIFICATION.

PROTHESIS [adj: **PROTHETIC**] — The insertion of a sound or sounds at the beginning of a word as in the development of Latin *schola* [skola] into Spanish *escuela* [eskwela] or the pronunciation of English *school* as [eskul] by people whose NATIVELANGUAGE is Spanish. Compare METATHESIS and EPENTHESIS.

PROTO-INDO-EUROPEAN — the language believed to be the parent language from which all the various INDO-EUROPEAN languages are descendant. The language is believed to have been spoken in an area north of the Black Sea roughly 5,000 years ago. Although no written records of this ancient language have survived, if indeed it was ever written down, linguists have postulated a good part of its vocabulary and structure through HISTORICAL RECONSTRUCTION.

PROTOTYPE — a member of a category that exhibits the essential characteristics of the category. For example, a robin is a prototypical bird, a carrot is a prototypical vegetable, and a dog is a prototypical pet. See STRENGTH OF ASSOCIATION.

PROXEMICS — the study of distance and contact in interpersonal communication in various cultures including how close one can comfortably stand to the person one is speaking with and whether or not touching is considered appropriate and, if so, what kind. Cultures which allow close contact and touching include Latin American cultures; those requiring more distance include Northern European cultures.

PROXIMAL ([+PRX]) versus **NONPROXIMAL** ([–PRX]) — a SEMANTIC FEATURE OPPOSITION distinguishing POSITIONAL THEMATIC RELATIONS that express contact ([+PRX]), such as the LOCATIVE PHRASE *on the table* in *The vase is on the table*, from those that do not ([–PRX]), such as the LOCATIVE PHRASE *near the table* in *The chair is near the table*. Verbs with a proximal meaning include *enter, exit, insert, extract, hit, touch*, etc. In NONPOSITIONAL RELATIONS, [+PRX] is used metaphorically to distinguish INALIENABLE POSSESSION ([+PRX]) from ALIENABLE POSSESSION ([–PRX]).

PS–RULE — see PHRASE STRUCTURE RULE.

PSYCHOLINGUISTICS [adj: **PSYCHOLINGUISTIC**] — the branch of LINGUISTICS that deals with the relationship between language and the psychological processes believed to underlie its acquisition and use such as memory, perception, sensation, attention, learning, motivation, etc.

PURPOSIVE (PUR) — the THEMATIC RELATION indicating the purpose of or reason for an action, e.g., *for fun* in *He learned Italian for fun*.

QUANTIFICATION [adj: **QUANTIFICATIONAL**] — a FUNCTIONAL relationship in which some word or PHRASE quantifies the meaning of *t all* in *All men are mortal* and *some* in *Some man is a linguist*. In logic, two types of quantification are distinguished, *universal quantification*, which is symbolized as ($\forall x$) meaning ‘all *x*,’ and *existential quantification*, which is symbolized as ($\exists x$) meaning ‘some *x*.’ Using these symbols, the meaning of the sentences *All men are mortal* and *Some men are linguists* is expressed as follows:

$\forall x$ (man (*x*) **v** mortal (*x*)) For all *x*, it is the case that, if *x* is a man, then *x* is mortal.

$\exists x$ (man (*x*) **v** linguist (*x*)) For some *x*, it is the case that, if *x* is a man, then *x* is a linguist, i.e., there is at least one man who is a linguist.

QUANTIFIER (QNT) — a word or phrase that expresses quantity, e.g., *all* in *all the girls*, *every* in *every boy*, *some* in *some books*, etc.

QUALITY — in PHONETICS, the TIMBER of a sound resulting from its FREQUENCIES. The VOWELS [i] and [ɪ] differ in quality, while the vowels [i] and [ɪ] differ in quantity ([i] is SHORT and [ɪ] is LONG). See LONG versus SHORT, TIMBER and QUANTITY.

QUANTITY — in PHONETICS, the duration or LENGTH of a sound. The VOWELS [i] and [ɪ] differ in quality or TIMBER, while the vowels [i] and [ɪ] differ in quantity ([i] is SHORT and [ɪ] is LONG). See LONG versus SHORT, TIMBER and QUALITY.

QUESTION — equivalent to INTERROGATIVE SENTENCE.

RATIONALISM [adj: **RATIONALISTIC**] — an approach to knowledge acquisition deriving from the work of philosophers Rene Descartes (1596–1650), Baruch Spinoza (1632–1677), and Gottfried Wilhelm von Leibniz (1646–1716). The rationalist approach claims that humans are born with a rich and detailed system of INNATE mechanisms which determine the way in which they acquire knowledge and interpret the data of everyday experience. Also referred to as “mentalism” and “nativism.” Compare EMPIRICISM.

RECIPIENT — see DATIVE.

RECIPROCAL PRONOUN — a PRONOUN that expresses mutual actions or relationships, e.g., *each other* and *one another*.

RECURSIVE — able to repeat indefinitely. For example, in PHRASE STRUCTURE RULES like the following, the symbol S is recursive allowing the generation of sentences like *John thinks Bill thinks Mary thinks Sue thinks...*:

$$\begin{array}{l} S \quad \div \quad NP \quad + \quad AUX \quad + \quad VP \\ VP \quad \div \quad V \quad + \quad (S) \end{array}$$

RECURSIVE TRANSITION NETWORK (RTN) — see FINITE STATE GRAMMAR.

REDUNDANCY — a predictable aspect of language, e.g., all NASAL ([+NASAL]) sounds are SONORANT ([+SONORANT], that is, hummable) and all living things ([+ANIMATE]) are tangible ([+CONCRETE]). Such predictable features are stated in redundancy rules like the following which are CONTEXT FREE:

$$\begin{array}{l} [+NASAL] \quad \div \quad [+SONORANT] \\ [+ANIMATE] \quad \div \quad [+CONCRETE] \end{array}$$

See SEMANTIC NETWORK.

REDUNDANT — predictable given other features.

REDUPLICATION — a repetition of all or part of a ROOT that is associated with a meaning change, e.g., Latin *tondeo* ‘I shave’ versus *totondi* ‘I have shaved’ and Mandarin Chinese *shuo* ‘say’ versus *shuoshuo* ‘say a little.’

REFERENCE — a syntactic process that involves the binding of a PRO-FORM such as *she* to a REFERENT such as *Mary* in *After Mary awoke, she had a big breakfast* or *After she awoke, Mary had a big breakfast*. Some linguists distinguish backward reference (ANAPHORA) from forward reference (CATAPHORA).

REFERENT — a phrase to which a PRO-FORM is bound. See REFERENCE.

REFERENTIAL (REF) — the THEMATIC RELATION for the entity, usually animate, for whose interest or in reference to whom something occurs.

REFLEXIVE PRONOUN — a PRONOUN that refers back to the SUBJECT of the CLAUSE in which it occurs, e.g., *myself*, *itself*, and *themselves*. The form of reflexive and INTENSIVE PRONOUNS is the same. In *I myself saw myself in the mirror*, the first *myself* is intensive, the second is reflexive.

REFLEXIVE VERB — a VERB whose SUBJECT and OBJECT refer to the same entity. English has very few verbs that must be reflexive like *absent* and *perjure* (*He absented himself/*her from the*

*meeting; She perjured herself/*him*). Other languages have many reflexive verbs, e.g., French *s'arrêter* 'to stop,' *s'asseoir* 'to sit down,' etc. and Spanish *entrarse* 'to get in,' *escaparse* 'to run away,' etc.

REGIONAL DIALECT — the DIALECT used in a particular geographical region such as the New York City area or Texas or Scotland.

REGULAR — see MARKED versus UNMARKED.

REGULATORS — see BODY LANGUAGE.

RELATIONAL GRAMMAR (RG) — a GRAMMATICAL theory developed by Paul Postal and David Perlmutter in the 1970s as an alternative to the STANDARD THEORY. In RG, grammatical relations like SUBJECT and DIRECT OBJECT are assumed to be PRIMITIVES, and the LINEAR ORDER of elements in a sentence is derivative. A relationship like PASSIVE involves the change of a DIRECT OBJECT to a SUBJECT, rather than the movement of a NP from one syntactic position to another. The STANDARD THEORY makes opposite claims, namely, that categories like NP and VP are central to syntax, that their linear order is fixed by PHRASE STRUCTURE RULES, that grammatical relations like SUBJECT and DIRECT OBJECT are derived from those phrase structure positions, and that PASSIVE is the result of a transformational rule.

RELATIVE CLAUSE — a CLAUSE which modifies a NOUN HEAD and is functionally equivalent to an ADJECTIVE, e.g., *that is crying in the baby that is crying* (cf. *the crying baby*). See RESTRICTIVE CLAUSE and NONRESTRICTIVE CLAUSE.

RELATIVE PRONOUN — PRONOUN that introduces a RELATIVE CLAUSE, e.g., *who, whom, and which*.

RELEASED versus **UNRELEASED** — a PHONETIC FEATURE OPPOSITION.

RESIDENCE — a specific syntactic position associated with a specific SYNTACTIC or SEMANTIC FUNCTION. For example, the X3 LEVEL PREHEAD position of a NOUN PHRASE in a SENTENCE is the residence of the SUBJECT. In general, the X3 LEVEL is the residence of SPECIFIERS; the X2 LEVEL, the residence of MODIFIERS; and the X1 LEVEL, the resident of COMPLEMENTS.

RESIDENT — a word or phrase that occupies a specific syntactic position (RESIDENCE) associated with a specific SYNTACTIC or SEMANTIC FUNCTION.

RESIDENTIAL GRAMMAR (RG) — a NONTRANSFORMATIONAL GRAMMAR based on a three level version of X-BAR SYNTAX in which semantic and syntactic categories are analyzed as bundles of FEATURES defined in terms of the human language apparatus.

RESTRICTIVE CLAUSE — a clause which restricts the meaning of the HEAD it modifies, e.g., *The island which/that I like to visit most is Sardinia*. Compare NONRESTRICTIVE CLAUSE.

RESULTATIVE (RES) — the THEMATIC RELATION indicating the product created from some materials and retaining the original ingredients used in its production, e.g., *into baskets* in *She wove the straw into baskets*. Related to INALIENABLE POSSESSION. Compare COMPOSITIONAL, ORIGINATIVE, and TERMINATIVE.

RESUMPTIVE PRONOUN — a PRONOUN that occupies the syntactic position of a phrase that has been dislocated for emphasis such as *him* in *That guy over there, Mary likes him* (left dislocation) and *Mary likes him, that guy over there* (right dislocation) or *he* in *That guy over there, he likes Mary* (left dislocation) and *He likes Mary, that guy over there* (right dislocation).

RHEME — a general term referring to the information in a sentence in DISCOURSE that is new. For example, in a SENTENCE like *Among the people in the crowd, wandered a lost little girl, the people in the crowd* is old information (already mentioned) whereas *a lost little girl* is new information.

RHETORIC — the study of effective SPEECH and WRITING including how to express oneself clearly and concisely, how to construct a coherent argument, how to organize the thoughts and information presented in the most efficient and comprehensible way, how to build to a powerful conclusion, and the like.

RHYME — See SYLLABLE.

RHYTHM — a patterned alternation of prominent phonetic elements with others of less prominence such as the alternation of STRESSED and UNSTRESSED SYLLABLES in English in SPEECH or poetry. See METER.

RIGHT BRANCHING CONSTRUCTION — a CONSTRUCTION whose internal dependency relationships branch to the right, that is, the most deeply embedded CONSTITUENT is the one furthest to the right, as in *This is the dog that caught the cat that chased the mouse that lived in the house that Jack built*. Compare MULTIPLE BRANCHING CONSTRUCTION, LEFT BRANCHING CONSTRUCTION, NESTED CONSTRUCTION, and CENTER EMBEDDED CONSTRUCTION.

RIGHT DISLOCATION — see RESUMPTIVE PRONOUN.

RIGHT HEMISPHERE — one of the two hemispheres of the CEREBRAL CORTEX with specialized functions, in most human beings, related to the appreciation and understanding of music and of spatial relationships.

ROMANCE LANGUAGES — a subgroup of ITALIC LANGUAGES that includes French, Spanish, Italian, and Romanian.

ROOT — a morpheme which constitutes the core element of a word or group of words of closely related meaning. For example, the morpheme *trust* serves as the root in all of the following words: *trusted, untrustworthy, mistrustful, entrust*, and so on.

ROSS' CONSTRAINTS — constraints on MOVEMENT in a TRANSFORMATIONAL GRAMMAR originally proposed by John Ross in the late 1960s. These include: (i) the *Complex Noun Phrase Constraint*, which stipulates that no element can be extracted out of an ADNOMINAL clause and accounts for the ungrammaticality of **Who do you believe the claim that Bill saw?* (ii) the *Sentential Subject Constraint*, which stipulates that no element can be moved out of a clause that is the subject of another clause and accounts for the ungrammaticality of **Who that Bill may date will upset Mary?* (iii) the *Coordinate Structure Constraint*, which stipulates that no element can be moved out of a coordinate structure and accounts for the ungrammaticality of **Who was John dating Sue and?* and (iv) the *Left Branch Condition*, which stipulates that no noun phrase on the left branch of another noun phrase can be extracted from that noun phrase and accounts for the ungrammaticality of **Whose did John date sister?*

ROUND (+ROUND)] versus NONROUND ([-ROUND]) — a PHONETIC FEATURE OPPOSITION. Rounded sounds are produced with a narrowing of the lips as in [u] and [w]; nonrounded sounds are produced without such narrowing [i] and [y].

ROUTINE — a specific ALGORITHM in a computer program designed to perform a specific task, such as separating an arbitrary string of symbols (letters, spaces, punctuation marks, etc.) into words.

RUN-ON SENTENCE — two INDEPENDENT CLAUSES lacking appropriate punctuation or a COORDINATING CONJUNCTION between them as in the following: *Oakland University is in Rochester, Wayne State University is in Detroit.* Also called “comma splice” or “comma fault.”

SCANSION — the analysis of poetry to reveal its METER.

SCHWA — the name of the sound [ə].

SCHWAR — the name of the sound [ɚ] often used to represent the final SYLLABLE of a word like *mother* [m ðɚ].

SECOND LANGUAGE — a language that is not one's NATIVELANGUAGE, that is, a language that one learns as an adult, rather than as a child.

SECOND LANGUAGE ACQUISITION — the acquisition of a SECONDLANGUAGE. Also called “L2 acquisition.”

SECOND PERSON — see PERSON.

SECONDARY COMPLEMENT (SCOMP) — the COMPLEMENT that is adjacent to the PRIMARY COMPLEMENT, e.g. in *She gave the book to him*, *the book* is the primary complement and *to him* is the secondary complement.

SELF-EMBEDDED CONSTRUCTION — equivalent to CENTER EMBEDDED CONSTRUCTION.

SEMANTIC FUNCTION — see THEMATIC RELATION.

SEMANTIC FEATURE — a FEATURE in SEMANTICS which is used to define and distinguish NATURAL CLASSES of semantic CATEGORIES, e.g., the feature [+TEMPORAL] which defines all expressions referring to time, such as *now*, *yesterday*, *in march*, *over the weekend*, etc.

SEMANTIC FEATURE OPPOSITION — see FEATURE.

SEMANTIC NETWORK — a semantic network is a DATABASE for storing information. It consists of *nodes* like ROBIN and BIRD, which represent the objects that the words *robin* and *bird* denote, and labeled links, which express the relationships between nodes. For example, the following semantic network contains an ISA link, which expresses the fact that a robin is a type of bird, and a HASA link, which expresses the fact that a bird has a beak:

ROBIN — ISA —> BIRD
BIRD — HASA —> BEAK

An important feature of semantic networks is that they reduce REDUNDANCY by allowing the characteristics of one category to be handed down to all members of that category, a feature called *inheritance*. For example, in the above network it is not necessary to include the fact that a ROBIN has a BEAK. Since a ROBIN is a type of BIRD, one can say that it inherits the characteristic of having a BEAK. This is extremely important since there are thousands of members of the category BIRD. Compare REDUNDANCY in linguistics.

SEMANTICS [adj: **SEMANTIC**] — the area of linguistics concerned with the meanings of words and sentences.

SEMIOTICS — the study of signs and symbols used in communication such as the Mores code, SIGN LANGUAGE, and Traffic Signs.

SEMIVOWEL — see GLIDE.

SENTENCE [adj: **SENTENTIAL**] — a sentence is a structured expression consisting minimally of two main CONSTITUENTS, a SUBJECT, which specifies the topic of the expression, and a PREDICATE, which specifies what is asserted of the topic.

SENTENCE ADVERB — an ADVERB that modifies an entire SENTENCE, e.g., *probably* in *He probably will go* and *He will probably go*. Often paraphrasable with a corresponding ADJECTIVE as in *It is probable that he will go*. Compare MANNER ADVERB.

SENTENTIAL SUBJECT CONSTRAINT — see ROSS' CONSTRAINTS.

SET — a collection of elements distinguished from all other elements. For example, the set NUMBER in English includes SINGULAR and PLURAL. In mathematics, this is expressed as NUMBER

= {SINGULAR, PLURAL} meaning the set NUMBER consists of the elements SINGULAR and PLURAL. The notation PLURAL ⊆ NUMBER means that PLURAL is contained in the set NUMBER. The notation DUAL ⊄ NUMBER means that DUAL is not contained in the set NUMBER.

SHORT — see LONG versus SHORT.

SHORT TERM MEMORY (STM) — the immediate memory capacity for new information. Compare LONG TERM MEMORY (LTM).

SIBILANT ([+SIBILANT]) versus **NONSIBILANT ([−SIBILANT])** — a PHONETIC FEATURE OPPOSITION. Sibilant sounds are produced by forcing the air through a narrow opening produced by a groove in the midline of the tongue as in [s] and [z]. Typically, sibilant sounds have a hissing quality; non-sibilant sounds, such as [f] and [v], do not have this quality.

SIGN LANGUAGE — a language used by deaf people and their associates which consists primarily of movements of the hands and arms, but also movements of the head, face, eyes, and mouth, to communicate. Sign languages are independent languages with their own grammar and vocabulary; they are not a translation of another language into gestures. Generally, sign languages incorporate a system of *finger spelling* in which different hand positions stand for individual letters of the alphabet used in the principal spoken language of the deaf person's native country. For example, AMERICAN SIGN LANGUAGE incorporates a system of finger spelling based on the English alphabet, which is useful when a deaf person wants to communicate a proper name or an uncommon word for which there is no established sign. American Indians often employed sign languages which were unrelated to specific words in any language and, therefore, could be understood by different tribes and nations, provided that the signer understood the signs. Compare SIGNED LANGUAGE.

SIGNED LANGUAGE — a system of hand movements and other gestures with a direct correspondence to a spoken language. For example, signed English or Siglish represents each English word as a separate hand movement or gesture. The signed sentence basically has the GRAMMAR and vocabulary of spoken English. Compare SIGN LANGUAGE.

SIMILE — a FIGURE OF SPEECH that expresses an explicit comparison between two generally unrelated things, as in *John eats like a pig*. Compare METAPHOR.

SIMPLE SENTENCE — a SENTENCE that consists of only one INDEPENDENT CLAUSE.

SINGULAR NUMBER (SG or SING) — see NUMBER.

SLANG — very informal language like the expressions *rip-off*, *hot-shot*, *dude*, *pot*, etc.

SLASH-DASH NOTATION — a symbolization consisting of a slash “/” followed by an underscore “_” to indicate the environment in which a rule applies. For example, the following

PHONOLOGICAL RULE in French indicates that a CONSONANT is deleted (becomes Ø) at the end of a word (indicated by “#”) if the next word begins with a consonant:

$$C \div \emptyset / _ \# C$$

SLASHES — symbols used in PHONOLOGY to indicate a PHONEMIC TRANSCRIPTION. For example, the word *can't* has the phonemic transcription /kæn\ nat/ (*can not*). Compare SQUARE BRACKETS.

SLUR — an offensive and disparaging remark, especially one referring to an individual's race or ethnic background such as *chink, honkey, kike, nigger, spick, wop*, etc.

SOCIAL DIALECT — a DIALECT associated with a particular social class or status or a particular ethnic or racial background such as Yenglish, a variety of English spoken by Yiddish speakers who have settled in America, or BLACK ENGLISH (BE), a variety of English spoken by African-Americans, or Chicano English, a variety of English spoken by people of Mexican descent.

SOCIOLINGUISTICS [adj: **SOCIOLINGUISTIC**] — the branch of LINGUISTICS that studies language in relation to social factors like social class, economic status, ethnic and racial background, educational level, occupation, sex, and so on. Different groups in society use language in different ways, and sociolinguists study the nature of such differences and their impact on society. See LANGUAGE PLANNING, DIALECT, REGIONAL DIALECT and SOCIAL DIALECT.

SONORANT ([–SONORANT]) versus **NONSONORANT** or **OBSTRUENT**([–SONORANT]) — a PHONETIC FEATURE OPPOSITION. Sonorants are sounds produced with a VOCAL TRACT configuration in which the airflow is relatively unimpeded so that sustained voicing is possible, such as VOWELS, NASALS, LIQUIDS, and GLIDES. Sonorants are usually hummable, e.g., [m], [n], [ŋ], [r], [l], [w], [y], etc. Nonsonorant sounds are produced with a vocal tract constriction that impedes the airflow out the mouth so that sustained VOICING is not possible, such as STOPS, FRICATIVES and AFFRICATES.

SOUND CHANGE — any regular historical change in the phonetic value of a sound. For example, the *[b^h] sound in PROTO-INDO-EUROPEAN developed in the ITALIC LANGUAGES as an [f] and in the GERMANIC LANGUAGES as a [b], a change that is seen in the initial consonants of many COGNATES in Sanskrit, Latin and English like the following:

Proto-Indo-European	Sanskrit	Latin	English
*b ^h rat _ᵛ –	<i>bhr̥ar</i> [b ^h rat _ᵛ]	<i>fr̥ter</i> [frate]	<i>brother</i> [br ð _ᵛ]
*b ^h reg–	<i>bhañj</i> [b ^h oñj]	<i>frang</i> – [fraŋg–]	<i>break</i> [brek]
*b ^h eu–	<i>bhā</i> [b ^h u–]	<i>fu</i> – [fu–]	<i>be</i> [bi]
*b ^h er–	<i>bhr̥r</i> – [b ^h ar–]	<i>fer</i> – [fe–]	<i>bear</i> [bær]

See GRIMM'S LAW and HISTORICAL RECONSTRUCTION.

SOUND SPECTROGRAPH — a machine used in ACOUSTIC PHONETICS to record a picture of a sound or sounds. The picture, called a “spectrogram” or “voiceprint,” consists of several dark black bands which vary in position according to the FREQUENCIES (rates of vibration) that are registered by the PHONETIC quality of the sound. Each of these bands is called a “formant.” For example, in the articulation of a VOWEL, the air stream from the lungs vibrates simultaneously at several different frequencies due to the shape of the VOCAL TRACT when the vowel is articulated. For each vowel, three dominant frequencies are produced, and each frequency registers as a separate formant in the spectrogram. See FREQUENCY.

SOURCE — the THEMATIC RELATION that identifies the origin of the state or action identified in the VERB, e.g., *from the house* in *She ran from the house*.

SPATIAL — pertaining to space such as the PHRASES *in the room*, *down toward the bottom of the ravine*, *up from underneath the River Rhine*, etc.

SPECIFIER — a GRAMMATICAL class of words and PHRASES used to specify a HEAD such as DETERMINERS like *the*, *this/these*, *that/those*, *a/an*, etc.

SPECTROGRAM — see SOUND SPECTROGRAPH.

SPEECH — spoken language. Opposed to WRITING.

SPEECH SYNTHESIS — see COMPUTATIONAL LINGUISTICS.

SPEECH ACT THEORY — a theory based on the work of philosophers John L. Austin and John R. Searle which attempts to analyze the role that UTTERANCES have in communication. A locutionary act is any utterance that is meaningful and understandable to a hearer, e.g., *I am going home*, but not *I am gorking desk* (*gork* is not an English word). An illocutionary act is making an utterance for a specific purpose, e.g., when a speaker says *I am going home*, the intended effect or illocutionary force of the utterance is to inform the hearer of the speaker’s intentions. A perlocutionary act is the effect that an utterance has on the hearer, e.g., upon hearing a guest say *I am going home*, the host might retrieve the guest’s coat.

SPELLING — the conventional set of letters and/or characters used to represent a particular word or PHRASE in WRITING.

SPONDEE — a metrical FOOT consisting of two LONG or STRESSED SYLLABLES (– –), as in *blackbird*, *railroad*, *White House*, etc.

SQUARE BRACKETS — symbols used in PHONOLOGY to indicate a PHONETIC TRANSCRIPTION. For example, the word *can’t* has the phonetic transcription [kænt]. Compare SLASHES.

STANDARD AMERICAN ENGLISH (SAE) — see STANDARD DIALECT.

STANDARD DIALECT — the dominant and often most prestigious DIALECT of any particular language. For example, STANDARD AMERICAN ENGLISH (SAE) is the variety of English that is taught in American public schools, used most often by people in the media, and preferred in writing.

STANDARD THEORY — the theory of TRANSFORMATIONAL GRAMMAR (TG) as articulated in Noam Chomsky's book *Aspects of the Theory of Syntax* (MIT Press, 1965). In the standard theory, GRAMMARS of NATURAL LANGUAGES contain two types of SYNTACTIC rules: (i) PHRASE STRUCTURE RULES, which generate the abstract DEEP STRUCTURE of sentences and (ii) TRANSFORMATIONAL RULES, which generate the SURFACE STRUCTURE of sentences.

STATEMENT — equivalent to DECLARATIVE SENTENCE.

STATIVE — relations that indicate rest or non-movement.

STEM — an elongation of a ROOT to which INFLECTIONS are added, often denoting a different DECLENSION or CONJUGATION. For example, in Latin, VERBS fall into four conjugational classes depending on the VOWEL that is added to the root: the first conjugation is marked with a LONG *a* as in *am-~re* 'to love' (root *am-*, stem *am~*, and INFINITIVE SUFFIX *-re*); the second conjugation is marked with a long *e* as in *mon-~re* 'to warn'; the third conjugation is marked with a SHORT *e* as in *teg-e-re* 'to cover'; and the fourth conjugation is marked with a long *i* as in *aud-~re* 'to hear.'

STOP — a CONSONANT produced when the air flow in the VOCAL TRACT is completely stopped, e.g., [p], [b], [t], [d], [k], [g], [ʒ], etc. A stop is a NONCONTINUANT.

STRENGTH OF ASSOCIATION — in SEMANTICS, the degree to which an item is associated with a particular class or CATEGORY. Various categories have prototypical members, that is, members which exhibit the essential characteristics of the category. For example, a robin is a prototypical bird meaning that it has the highest strength of association with the category *bird*; if speakers are asked to list birds, most would include *robin* as one of the first few members of the list because a robin has the essential characteristics of birds (it flies, lays eggs, builds a nest, and so on). A chicken, on the other hand, is not a prototypical bird (it does not fly or migrate), so speakers are unlikely to name a chicken as the first bird they think of when someone asks them to list birds. Therefore, a chicken is said to have a lower strength of association with the category *bird* than a robin.

STRESS — the relative emphasis or accent given to individual sound segments or SYLLABLES, e.g., in the word *unlikely*, the stress is on the second SYLLABLE *like*.

STRESSED ([+STRESS]) versus **UNSTRESSED** ([-STRESS]) — A stressed element is one that has an appreciable emphasis; an unstressed element is one without appreciable emphasis. For example, in the word *consider* [kənˈsɪdər], the second SYLLABLE is stressed (indicated by the ACUTE accent mark over the "ɪ"), while the first and last syllables are unstressed.

STROKE — technically, a *cerebral vascular accident*, that is, the loss of consciousness, sensation, voluntary movement or other brain function as a result of an obstruction of blood flow or rupture of an artery in the brain or one supplying blood to the brain.

STRUCTURAL AMBIGUITY — ambiguity that arises from alternative structural analyses. For example, in *The man who left suddenly returned*, the ADVERB *suddenly* is structurally either part of the VERB PHRASE containing *left* or the one containing *returned*.

STRUCTURAL CATEGORY — a CATEGORY that refers to SYNTACTIC STRUCTURE as opposed to SYNTACTIC FUNCTION. For example, the phrase *with the red beard* has the structure of a PREPOSITIONAL PHRASE (its HEAD is a PREPOSITION) but the function of MODIFIER in *the man with the red beard*. Compare FUNCTIONAL CATEGORY.

STRUCTURE-DEPENDENT PRINCIPLE — a universal PRINCIPLE that the rules of SYNTAX in every NATURAL LANGUAGE must operate on STRUCTURAL REPRESENTATIONS.

STRUCTURAL GRAMMAR — a theory of GRAMMAR that provides DESCRIPTIVELY ADEQUATE characterizations of NATURAL LANGUAGE in the form of STRUCTURAL REPRESENTATIONS.

STRUCTURAL REPRESENTATION — the syntactic representation of a SENTENCE in terms of LABELED BRACKETS or a TREE DIAGRAM.

STYLISTICS — the branch of LINGUISTICS that deals with the CONTEXTS in which particular expressions are used especially the choices that people make in how they say or write something and the effect that those choices have on listeners or readers. See FORMAL versus INFORMAL LANGUAGE, SLANG, TABOO, and EUPHEMISM.

SUBJACENCY — a PRINCIPLE on MOVEMENT in TRANSFORMATIONAL GRAMMAR which says essentially that no rule can move an element over more than one S or NP node. Without the subjacency principle, GRAMMARS would allow SENTENCES like *Who_i does John know the man who kissed [e]_i.

SUBJECT [adj: **SUBJECTIVE**] — a unit that specifies the PHRASE which typically performs the action described in the PREDICATE. Formally, the subject is marked with NOMINATIVE CASE when it occurs as a PRONOUN, e.g., *she* in *She ran away*. In English and many other languages, the subject is also the phrase which agrees in NUMBER and PERSON with the VERB, e.g., *I am going*, *She is going*, *They were going*, etc.

SUBJECT COMPLEMENT — (i) a CLAUSE embedded into subject position of a PREDICATE, e.g., *that John left* in *That John left is odd*; or (ii) a PHRASE referring to the SUBJECT and linked to it by a COPULATIVE VERB, e.g., *a doctor* in *She became a doctor*.

SUBJECT COMPLEMENTATION — the embedding of a CLAUSE into SUBJECT position of a PREDICATE, e.g., *that John left* in *That John left is odd*.

SUBORDINATING CONJUNCTION — a CONJUNCTION that connects elements in such a way as to place one in a lower order or rank with respect to the other, e.g., *Sit down, while you are eating your spinach.*

SUBORDINATION — the embedding of one SENTENCE (V3) into an adverbial or adjectival position of another sentence (X2). See ADJECTIVAL SUBORDINATION and ADVERBIAL SUBORDINATION.

SUBSCRIPT/SUPERSCRIPT NOTATION — a notation used in PHONOLOGY to indicate the smallest number (subscript) and the greatest number (superscript) of an item like a CONSONANT (C) that is allowed in a rule. For example, C_1^2 means ‘at least one and at most 2 consonants’; C_0^n means ‘as few as none and as many as any number of consonants.’ The following rule in English states that a VOWEL is STRESSED if it is followed by two or more consonants at the end of a word:

$$V \div [+STRESS] / _ C_2^n \#$$

See SLASH/DASH NOTATION.

SUBSTANTIVE — a SYNTACTIC supercategory that includes all noun-like CATEGORIES such as NOUNS, PRONOUNS, QUANTIFIERS, etc.

SUBSTANTIVE UNIVERSAL — stipulations on the elements or features that can occur in NATURAL LANGUAGE.

SUBSTRATUM — (i) in HISTORICAL LINGUISTICS, a language spoken by people in a particular region which strongly influences the development of the dominant language for that region, such as the influence of Norman French on Old English. (ii) in LANGUAGE ACQUISITION, the original language for speakers who acquire another language. The term is important for the influence the substratum language has on the acquisition of the other language. For example, the English spoken by someone who is a native speaker of Italian will show characteristics of the substratum Italian; a speaker might say *Or you go or you stay* rather than *Either you go or you stay*, because Italian uses the same word *o* ‘or’ in both parts of the sentence.

SUFFIX — an AFFIX attached to the end of a ROOT or STEM, e.g., *-ly* in *unlikely*.

SULCUS [pl. **SULCI**]— see GYRUS.

SUPERLATIVE DEGREE — a degree of MODIFICATION in ADJECTIVES and ADVERBS used when three or more items are being compared (*John is the best boy in the class*). See POSITIVE DEGREE and COMPARATIVE DEGREE.

SUPRASEGMENTAL — a vocal modification executed along with the pronunciation of VOWELS and CONSONANTS. Two important suprasegmental features are PITCH (the relative tone at which individual sound segments or groups of segments are produced) and STRESS (the relative

emphasis or ACCENT given to individual sound segments or groups of segments). FEATURES like pitch and stress often distinguish words from each other. For example, *permit* must be pronounced with heavy stress on the first syllable [pɛrmit] if it is used as a noun, but with heavy stress on the second syllable [pɛrmít] if it is used as a verb. See TONE.

SURFACE STRUCTURE — a term used in the STANDARD THEORY of TRANSFORMATIONAL GRAMMAR (TG) for the superficial SYNTACTIC REPRESENTATION of a SENTENCE generated by TRANSFORMATIONAL RULES. For example, the sentences *The censors will probably ban that movie* and *That movie, the censors will probably ban* are related by the transformational rule of TOPICALIZATION which moves the PHRASE *that movie* from its DEEP STRUCTURE position as the DIRECT OBJECT of the VERB *ban* to sentence initial position.

SYLLABIC ([+SYLL]) versus **NONSYLLABIC** ([−SYLL]) — a PHONETIC FEATURE OPPOSITION. Syllabic sounds are those which can function as the nucleus (most prominent part) of a SYLLABLE. Typically, the nucleus is a VOWEL, but a LIQUID or a NASAL may also serve as the nucleus. When they have syllabic status, liquids and nasals are transcribed with a small circle under the letter, e.g., *vowel* [vaw̩] or *dragon* [drægn̩].

SYLLABIC WRITING — see WRITING.

SYLLABLE — a unit of SPEECH longer than a sound and shorter than a word. Typically, syllables consist of a VOWEL preceded and followed by one or more CONSONANTS as in the monosyllabic English words *ate* [et], *say* [se], *late* [let], *crate* [kret], *straight* [stret], *plates* [plets], and so on. Syllables are often described in terms of four units: (i) the *nucleus* is the only obligatory element and it forms the most prominent part of the syllable; (ii) the *coda* consists of those elements that follow the nucleus in the same syllable; (iii) the *rhyme* includes the nucleus and the coda; and, (iv) the *onset* consists of those elements that precede the nucleus. Thus, the word *constrained* [kɔnstrend] has two syllables; the first syllable [kɔn] consists of the nucleus [ɔ], the coda [n], the rhyme [ɔn], and the onset [k]; the second syllable [strend] consists of the nucleus [e], the coda [nd], the rhyme [end], and the onset [str]. The permissible sequences of sounds that can form codas and onsets is highly constrained in most languages. For example, the maximum number of elements that can form an onset in English is three; the first must be [s]; the second must be a voiceless stop; and, the third must be a liquid, e.g., [str] in *strained* [strend]. See PHONOTACTIC RULE and ACCIDENTAL versus NONACCIDENTAL GAP.

SYLLOGISM [adj: SYLLOGISTIC] — a DEDUCTIVE ARGUMENT consisting of a major premise, a minor premise, and a conclusion, e.g., all birds fly (major premise), a robin is a bird (minor premise), therefore, a robin flies (conclusion).

SYNCHRONIC — occurring at one point in time. Opposed to DIACHRONIC.

SYNCOPE — the loss of a sound or sounds in the middle of a word, e.g., the shortening of *northeast* to *nor'east*. Compare HAPLOLOGY.

SYNCRETISM — the collapsing of two or more MORPHOLOGICALLY distinct forms into one, such as the merging of the PAST TENSE and PAST PARTICIPLE in English: in regular VERBS like *play*, the forms have become the same (*played*); in irregular verbs, the forms have remained distinct (*wrote* versus *written*).

SYNECDOCHE — a FIGURE OF SPEECH in which a part or subclass is mentioned as representing the whole or larger class, as in *Give us this day our daily bread*, where *bread* means ‘food’ or ‘sustenance.’

SYNONYM — synonyms are words that are pronounced differently but mean the same thing, e.g., *huge* and *enormous* (adjectives), *oculist* and *eyedoctor* (nouns), *imprison* and *incarcerate* (verbs).

SYNTACTIC CATEGORY — a CATEGORY such as PREPOSITION or DETERMINER distinguished by SYNTACTIC FEATURES.

SYNTACTIC FEATURE — a FEATURE in SYNTAX that refers to the LINEAR and HIERARCHICAL structure of PHRASES, e.g., PREHEAD and POSTHEAD.

SYNTACTIC FEATURE OPPOSITION — see FEATURE.

SYNTACTIC FUNCTION — see GRAMAMTICAL RELATION.

SYNTACTIC RELATION — see GRAMMATICAL RELATION.

SYNTACTIC STRUCTURE — the phrase structure of a SENTENCE specified by PHRASE STRUCTURE RULES.

SYNTAGMATIC RELATION versus **PARADIGMATIC RELATION** — these terms refer to the relationship which a word or PHRASE has to other words and phrases. A syntagmatic relation is a combinatory relationship while a paradigmatic relation is a substitutionary relationship. For example, the word *the* has a syntagmatic relationship with the other words in *all the colorful balls* because the words can be combined together into a phrase. The same word *the* has a paradigmatic relationship with *these* and *those* because any one can be substituted for the other in the sequence *all ___ colorful balls*, but no more than one can occur in the same sequence.

SYNTAX [adj: **SYNTACTIC**] — the branch of linguistics that studies the way words are combined to form a SENTENCE.

SYNTHETIC LANGUAGE — a TYPOLOGICAL classification of languages referring to those languages in which words consist of a STEM and one or more AFFIXES. Finnish, Hungarian, Estonian, Swahili, Turkish, Greek, Latin, Sanskrit, and Russian are synthetic languages. See also AGGLUTINATING LANGUAGE, INFLECTIONAL LANGUAGE, and FUSIONAL LANGUAGE. See Figure Two II on Page 17.

TABOO — very offensive and inappropriate language, e.g., expressions like *Up yours* and *He's a real prick*.

TACTILE AGNOSIA — see AGNOSIA.

TAXONOMY [adj: **TAXONOMIC**]— (i) the study of classification; (ii) a particular classification, such as a taxonomy of VERB constructions, which would be a classification of verbs in a language broken down in classes like TRANSITIVE, INTRANSITIVE, COPULATIVE, DITRANSITIVE, etc.

TELEGRAPHIC SPEECH — (i) generally, language which resembles a telegram such as saying *Arrive Tuesday* instead of *I will be arriving on Tuesday*; (ii) the SPEECH of children during an early stage of LANGUAGE ACQUISITION which resembles a telegram, e.g., SENTENCES like *Put truck garage* for *I am going to put the truck into the toy garage*.

TEMPORAL — relating to time, specifically a PHRASE or CLAUSE that expresses time such as those in *He left at noon*, *She left when he did*, *She arrived on Thursday*, *He remained for the whole summer*. Opposed to SPATIAL.

TEMPORAL ([–TMP]) versus **NONTEMPORAL** ([–TMP]) — a SEMANTIC FEATURE OPPOSITION that distinguishes THEMATIC RELATIONS which refer to a location in space ([–TMP]), such as LOCATIVE in *Michigan*, from those which refer to a location in time ([+TMP]) such as LOCATIVE in *March*.

TEMPORAL LOBE — that portion of the CEREBRAL CORTEX that is concerned with the perception and identification of sounds, particularly the sounds of languages, and with memory. See Figure Six on Page 26.

TENSE (TNS) — an INFLECTION in VERBS that indicates distinctions in the TIME (PRESENT, PAST, FUTURE) and the ASPECT (PROGRESSIVE, PERFECTIVE) of an action or state.

TENSE ([+TENSE]) versus **NOTTENSE or LAX** ([–TENSE]) — a PHONETIC FEATURE OPPOSITION. Tense sounds are produced with a deliberate, accurate, and maximally distinct articulatory gesture that involves considerable muscular effort; lax sounds are produced rapidly and somewhat indistinctly. The terms usually apply to VOWELS; the [+TENSE]/[–TENSE] opposition is seen in [i]/[ɪ], [e]/[ɛ], [u]/[ʊ], and [o]/[ɔ].

TENSED–S CONDITION — a constraint on MOVEMENT in early TRANSFORMATIONAL GRAMMAR, which stipulates that no constituent can be moved out of a tensed sentence and accounts for the difference between *John believes Bill to be the best candidate*/*Bill is believed to be the best candidate* and *John believes that Bill is the best candidate*/**Bill is believed is the best candidate*.

TERMINAL NODE — see TREE DIAGRAM.

TERMINATIVE CASE — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to express the idea *up to*. For example, in Estonian, the phrase *kohvikuni* (ROOT *kovik-*) means ‘up to the coffee house.’

TERMINATIVE (TRM) — the THEMATIC RELATION indicating the entity or condition into which something is transformed, e.g., *into debt* in *John got himself into debt*. Related to ALIENABLE POSSESSION. Compare RESULTATIVE, COMPOSITIONAL, and ORIGINATIVE.

TEXT — a selection of spoken or written language taken as a whole such as a speech, conversation, scene in a play, poem, chapter in a book, etc.

TEXT LINGUISTICS — the branch of linguistics that studies texts, especially their function, organization, and characteristics such as COHESION, informativeness, effectiveness, and structure. See DISCOURSE ANALYSIS.

THEMATIC RELATION — a term that specifies the various roles that a NOUN PHRASE can play in a CLAUSE, e.g., AGENT, EXPERIENCER, SOURCE, GOAL, etc.

THEME — (i) generally, equivalent to THEMATIC RELATION; (ii) specifically, the THEMATIC RELATION indicating the entity involved in the action or state identified in the PREDICATE which is not appreciably affected by that action or state, e.g., *car* in *John has a car* and *John sold his car to Bill*. See ASSOCIATIVE.

THEORY — an explanation of some natural phenomenon that is based on observation and CRITICAL THINKING and generally consists of several HYPOTHESES which have been tested, confirmed and formulated as FORMAL PRINCIPLES to explain and predict that phenomenon. For example, GENERATIVE GRAMMAR (GG) is a theory of language based on many observations about language such as the fact that NATIVE SPEAKERS are capable of producing and understanding an infinite number of SENTENCES in their NATIVE LANGUAGE. GG consists of a SET of hypotheses about the structure of those sentences. These hypotheses have been tested against a wide range of DATA from many languages to see if they are valid and if they account for what natives speakers know about sentences in their native language. Those hypotheses that have been confirmed have been formulated as a variety of rules, such as PHRASE STRUCTURE RULES, and principles, such as the MINIMAL DISTANCE PRINCIPLE.

THESAURUS — a book of words and PHRASES organized and cross-referenced in terms of meaning and involving criteria like SYNONYMY, ANTONYMY, MERONYMY, HOLONYMY, HYPONYMY, HYPERNYMY, etc.

THETA-CRITERION (θ-CRITERION) — see THETA-THEORY.

THETA-ROLE (θ-ROLE) — the term used in TRANSFORMATIONAL GRAMMAR for THEMATIC RELATION.

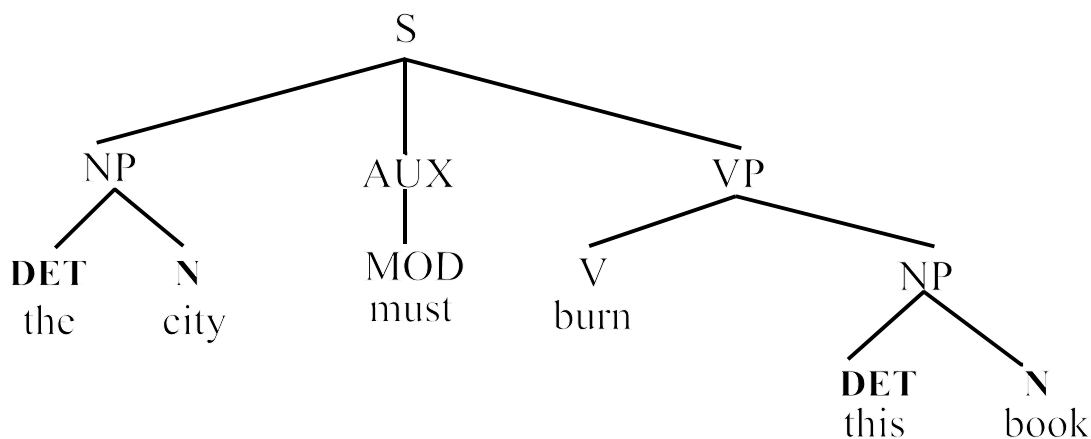
like the following: A SENTENCE is a structured expression consisting minimally of a SUBJECT and a PREDICATE. The SUBJECT specifies the TOPIC of the SENTENCE, and the PREDICATE specifies what is asserted of the topic. PREDICATES always contain a VERB, which is a word that serves to express an action, occurrence or state of being; sometimes PREDICATES also contain a DIRECT OBJECT, which specifies the person or thing directly affected by the action defined in the VERB. Since they must at least contain a VERB, PREDICATES are also referred to as VERB PHRASES.

TRANSFORMATIONAL GRAMMAR (TG) — a GRAMMATICAL model that contains TRANSFORMATIONAL RULES like MOVEMENT and DELETION.

TRANSFORMATIONAL RULE (T-RULE) — a rule that generates the SURFACE STRUCTURE of sentences by the MOVEMENT or DELETION of elements.

TRANSITIVE VERB — a VERB that takes an object, e.g., *break* in *John broke the vase*, and *destroy* in *John destroyed the vase*.

TREE DIAGRAM — a HIERARCHICAL representation of SYNTACTIC STRUCTURES such as the following:



Each labeled point in the above diagram is a NODE (S, NP, AUX, VP, DET, N, MOD, V). The S node is called the ROOT of the tree, and each node directly above a word is called a TERMINAL NODE. The tree also illustrates formal relationships like PRECEDENCE, DOMINANCE, IMMEDIATE DOMINANCE, C-COMMAND, and GOVERN:

PRECEDENCE — A node " precedes a node \$ if it occurs before it. The nodes labeled DET precede the nodes labeled N in both NP's, expressing the fact that DETERMINERS must precede NOUNS in NOUN PHRASES.

DOMINANCE — A phrase " is said to dominate a phrase \$ if \$ is totally contained in ". The S node dominates all of the nodes in the tree.

IMMEDIATE DOMINANCE — A node " immediately dominates a node \$ if " dominates \$ and there is no intervening node between " and \$. The NP nodes immediately dominate the N nodes (there is no node between them). While the S node dominates all of the nodes in the tree, it immediately dominates only the subject NP, AUX and VP.

C-COMMAND — A node " C-commands a node \$ if the first branching node immediately dominating " dominates \$. In English, the SUBJECT of a VERB is the NP which C-commands and precedes the verb; the DIRECT OBJECT of a VERB is the NP which C-commands and follows the verb.

GOVERN — A node " governs a node \$ if " C-commands \$ and if " precedes \$. The V node C-commands its DIRECT OBJECT so it is said to GOVERN that NP (the first branching node above V is VP and that VP dominates the direct object).

TRIAL — a distinction in NUMBER used for three things, as opposed to one or two. See NUMBER.

TRILL — a CONSONANT produced by a series of rapid taps of one flexible part of the VOCAL APPARATUS against the other, such as the ALVEOLAR trill [r] found in Italian.

TROCHEE — a metrical FOOT consisting of one long or stressed SYLLABLE followed by one short or unstressed syllable (– ˘), e.g., the syllabic structure of the words *angry*, *money*, *gypsy*, etc.

TYPE versus **TOKEN** — A type is any class, organized on the basis of any set of criteria; a token is any particular instance of a type. For example, all the people with the first name *John* are tokens of the class "People Named *John*"; the expressions *good-bye*, *see you later*, and *so long* are tokens of the class "Expressions Used in Parting."

TYPOLOGICAL (TYP) — the THEMATIC RELATION that expresses the class/member relationship. TYPOLOGICAL1 (TYP1) specifies the class; TYPOLOGICAL2 (TYP2) specifies the member. Compare HYPERNYM (=TYP1)/HYPONYM (=TYP2).

TYPOLOGICAL LINGUISTICS — the study of the structural similarities between languages regardless of their history. For example, about 45% of the world's languages have the word order SOV (S=subject, O=object, V=verb); these include Turkish, Burmese, Hindi, Tamil, Navajo, and Hopi, which belong to a variety of different language families. Another 42% have the order SVO including Germanic Languages (English, German), Romance Languages (French, Spanish, Italian), Thai, and Indonesian, while 9% have the order VSO including Celtic Languages (Welsh, Irish), Austronesian Languages (Hawaiian), and Semitic languages (Hebrew, Arabic). Languages have also been classified typologically in terms of their word structure; see ANALYTIC LANGUAGE, SYNTHETIC LANGUAGE and POLYSYNTHETIC LANGUAGE. See Figure Two I on Page 16 and Figure Two II on Page 17.

ULTIMA — the last SYLLABLE of a word, e.g., *ly* in *unlikely*.

UMLAUT — the name of the DIACRITIC consisting of two dots placed over a letter, e.g., German *älter* ‘older.’

UNACCEPTABLE — see ACCEPTABLE versus UNACCEPTABLE.

UNASPIRATED ([–ASPIRATED]) — see ASPIRATED versus UNASPIRATED.

UNATTESTED — see HISTORICAL RECONSTRUCTION.

UNGRAMMATICAL — see GRAMMATICAL versus UNGRAMMATICAL.

UNIVERSAL — applicable to all human languages.

UNIVERSAL GRAMMAR — a general THEORY of human language that contains the entire SET of LINGUISTIC UNIVERSALS. Also called “core grammar.”

UNIVERSAL QUANTIFIER — see QUANTIFICATION.

UNMARKED — see MARKED versus UNMARKED.

UNRELEASED ([–RELEASED]) — see RELEASED versus UNRELEASED.

UNSTRESSED ([–STRESS]) — see STRESSED versus UNSTRESSED.

UNVOICED ([–VOICED]) — see VOICED versus NONVOICED.

UTTERANCE – any linguistic expression including STATEMENTS like *I am going home*, QUESTIONS like *Where are you going*, responses like *Home*, COMMANDS like *Go home*, and so on.

UVULA — the small flap of fleshy tissue dangling from the VELUM. See Figure One on Page 15.

VARIABLE — something that varies within a given set of values. For example, in the simple equation $x + y = 3$, x and y are variables which can be, respectively, 0 and 3, 1 and 2, 2 and 1, or 3 and 0. In LINGUISTICS, an example of variables occurs in the use of Greek letters whose value varies between positive (+) and negative (–). For example, [“ANTERIOR, “CORONAL] means either [+ANTERIOR, +CORONAL] or [–ANTERIOR, –CORONAL]. See ALPHA-NOTATION.

VELAR — a stop formed by placing the tongue against the VELUM.

VELUM [adj: **VELAR**] — the flexible plate of muscular tissue that makes up the posterior portion of the roof of the mouth. See Figure One on Page 15.

VERB (V) — A verb is a word that serves to express an action, an occurrence, or a state of being, e.g., *shot* in *The inspector shot the bandit*, *blew up* in *The school blew up*, *be* in *That girl is clever*.

Verbs are identifiable by a variety of INFLECTIONAL distinctions, including TENSE, PERSON, NUMBER, and VOICE.

VERB PHRASE (VP) — a PHRASE whose HEAD is a VERB, e.g., the VP *totally depends on his parents* contains the verb *depends* as its head.

VERBAL — pertaining to a VERB.

VERBAL ([+VBL]) versus **NONVERBAL ([−VBL])** — a MORPHOLOGICAL FEATURE OPPOSITION distinguishing a MORPHOSYNTACTIC CATEGORY that is marked inherently for MODE (MOOD), TENSE, ASPECT, and/or VOICE, such as the category VERB ([+VBL]), from one that is not, such as the category NOUN ([−VBL])

VERBAL ADJECTIVE — a VERB form which functions like a ADJECTIVE, e.g., a PARTICIPLE.

VERBAL NOUN — a VERB form which functions like a NOUN, e.g., a GERUND.

VISUAL AGNOSIA — see AGNOSIA.

VOCAL APPARATUS — all of the vocal organs and structures in humans used to form the various sounds of human languages including the VOCAL TRACT, ALVEOLAR RIDGE, PALATE, VELUM, tongue, lips, teeth, etc. Also called “articulatory apparatus.” See Figure One on Page 15.

VOCAL CORDS — two pairs of ligaments (tough bands of elastic tissue) which are contained in the LARYNX and which vibrate in the production of VOICED sound. Also called “vocal folds.” See Figure One on Page 15.

VOCAL TRACT — the entire air passage above the LARYNX (the bony structure containing the VOCAL CORDS) generally viewed as containing three cavities or areas: the pharyngeal cavity or PHARYNX, the area of the throat above the larynx; the NASAL CAVITY, the air passage from the nostrils to the pharynx; and, the ORAL CAVITY, the air passage from the lips to the pharynx. See Figure One on Page 15.

VOCALIC ([+VOC]) versus **NONVOCALIC ([−VOC])** — a PHONETIC FEATURE OPPOSITION. Vocalic sounds are produced with an ORAL CAVITY in which the most radical constriction does not exceed that found in the HIGH vowels [i] and [u], and with the VOCAL CORDS positioned so as to allow spontaneous voicing; in producing nonvocalic sounds one or both of these conditions are not satisfied. See CONSONANT and GLIDE. Compare CONSONANTAL.

VOCATIVE CASE (VOC) — an INFLECTION in SUBSTANTIVES (nouns, pronouns, etc.) generally used to mark the person or thing addressed, as in Latin *Et tu, Brute* ‘Even you, Brutus?’

VOICE — an INFLECTION in VERBS that refers to the distinction between ACTIVE, PASSIVE, and MIDDLE.

VOICED ([+VOICED]) versus **NONVOICED** or **VOICELESS** ([–VOICED]) — a PHONETIC FEATURE OPPOSITION. Voiced sounds are produced with the VOCAL CORDS vibrating as in [b], [d], [g], etc.; voiceless sounds are produced without such vibration as in [p], [t], [k], etc. “Nonvoiced,” “unvoiced,” and “voiceless” are equivalent terms.

VOICELESS — see VOICED.

VOICING — the vibration of the VOCAL CORDS.

VOICEPRINT — see SOUND SPECTROGRAPH.

VOWEL (V) — a basic sound segment produced when air is modified by the vibration of the vocal cords, and when the tongue is held in specific positions in the mouth.

WERNICKE’S APHASIA — [after Carl Wernicke, German neurologist, 1848–1905] — a predominately receptive disorder of language characterized by an impaired ability to understand spoken language. Often associated with injury to the posterior portion of the TEMPORAL LOBE in the LEFT HEMISPHERE (WERNICKE’S AREA).

WERNICKE’S AREA — the posterior portion of the TEMPORAL LOBE in the LEFT HEMISPHERE. See Figure Six on Page 26.

WORD — an inexact term with no single definition that applies to all the world’s languages. For example, one might say that a word in English is a sequence of sounds that can stand alone in SPEECH or WRITING. While this definition works for all of the words in the previous sentence, it seems inappropriate for contractions like *won’t* or *there’s*, for hyphenated words like *snow–white* as opposed to compounds written as one word (*snowmobile* and *snowflake*) and others written as two (*snow pea* and *snow tire*), and for pairs like the NOUN *snow blindness* versus the ADJECTIVE *snow–blinded*.

WORD BOUNDARY — see BOUNDARY SYMBOL.

WORD SENSE — an individual meaning of a word, e.g., *fly* meaning ‘zipper’ or ‘insect’ or ‘flap of a tent’ and so on.

WRITING — written language, as opposed to SPEECH. There are three basic types of writing systems used in the world’s languages: alphabetic, syllabic, and logographic. An alphabetic writing system is based on an ALPHABET with a correspondence between the letters or characters and sounds. Sometimes the correspondence is unique, that is, there is one to one correspondence between a letter and a sound, as in Italian. More often, as in English, one letter or combination of letters can represent several sounds like the “c” in *race*, *racial*, and *screw*, and one sound can be represented by several letters or combinations of letters, like the “ea” in *heart*, *great*, *threat*, and *meat*. A syllabic writing system is one in which symbols represent SYLLABLES such as the Katakana and Hiragana systems used to write Japanese. A logographic writing system is one that uses

symbols or characters to represent whole words or MORPHEMES rather than individual sounds or SYLLABLES, such as the system of characters used to write Chinese. Compare PICTOGRAM, IDEOGRAM, HIEROGLYPHICS, and CUNEIFORM.

X0 LEVEL ([±X0L]) — a SYNTACTIC FEATURE OPPOSITION distinguishing PHRASES that can be DOMINATED by an X0 level in X-BAR SYNTAX from phrases which cannot. For example, PARTICLES like *out* in *take out the garbage* are X0 level RESIDENTS in VERB PHRASES, so they have the feature [+X0L]. ADVERBS never occur on the X0 level, so they are [-X0L]. The X0 level is the RESIDENCE of elements of phrasal words like *take out*, *hand in*, *put on*, etc.

X1 LEVEL ([±X1L]) — a SYNTACTIC FEATURE OPPOSITION distinguishing PHRASES that can be DOMINATED by an X1 level in X-BAR SYNTAX from phrases which cannot. For example, ADJECTIVES are X1 level RESIDENTS in NOUN PHRASES, so they have the feature [+X1L]. ADVERBS never occur on the X1 level, so they are [-X1L]. The X1 level is the RESIDENCE of COMPLEMENTS, including those that form the first member of COMPOUND NOUNS such as *electrical* in *electrical engineer* and *math* in *math teacher*.

X2 LEVEL ([±X2L]) — a SYNTACTIC FEATURE OPPOSITION distinguishing PHRASES that can be DOMINATED by an X2 level in X-BAR SYNTAX from phrases which cannot. For example, ADJECTIVES are X2 level RESIDENTS in NOUN PHRASES, so they have the feature [+X2L]. DETERMINERS never occur on the X2 level, so they are [-X2L]. The X2 level is the RESIDENCE of MODIFIERS.

X3 LEVEL ([±X3L]) — a SYNTACTIC FEATURE OPPOSITION distinguishing PHRASES that can be DOMINATED by an X3 level in X-BAR SYNTAX from phrases which cannot. For example, DETERMINERS are X3 level RESIDENTS in NOUN PHRASES, so they have the feature [+X3L]. ADJECTIVES never occur on the X3 level, so they are [-X3L]. The X3 level is the RESIDENCE of SPECIFIERS.

X-BAR SYNTAX — a model of syntactic analysis in which the number of hierarchical levels that occurs in any PHRASE is increased from the traditional representation of simply XP over X, where X is any SYNTACTIC CATEGORY, e.g., NP over N, VP over V, AP over A, etc. Intermediate levels are indicated by a bar placed over the category (NP over \bar{N} over N), or by a prime (NP over N' over N), or by numbering the levels (N2 over N1 over N0). The number of intermediate levels varies in different theories. At least one intermediate level is generally recognized (X2 over X1 over X0), although two intermediate levels is not uncommon (X3 over X2 over X1 over X0). In some

systems, the S node of the STANDARD THEORY is equated with V3 giving the following parallel structures for SENTENCES and NOUN PHRASES (PST = PAST TENSE; POS = POSSESSIVE):

- (i) The lawyers carefully interrogated the witness with very precise questions.

[_{V3} [_{N3} the lawyers] PST [_{V2} [_{C3} carefully] [_{V1} [_{V0} interrogate] [_{N3} the witness] [_{C3} with very precise questions]]]]

- (ii) The lawyers' careful interrogation of the witness with very precise questions...

[_{N3} [_{N3} the lawyers] POS [_{N2} [_{C3} careful] [_{N1} interrogation] of [_{N3} the witness] [_{C3} with very precise questions]]]]

REFERENCES

- Akmajian, Adrian, Richard A. Demers, Ann K. Farmer, and Robert M. Harnish. 1995. *Linguistics: An Introduction to Language and Communication*, 4th Edition. Cambridge, MA: MIT.
- Binkert, Peter J. 1994. *Language and Man*. Troy, MI: Langtech.
- Crystal, David. 1985. *A Dictionary of Linguistics and Phonetics*. Oxford: Basil Blackwell.
- Crystal, David. 1992. *An Encyclopedic Dictionary of Language and Languages*. Oxford: Basil Blackwell.
- Finegan, Edward. 1994. *Language: Its Structure and Use*, 2nd Edition. New York: Harcourt.
- Fromkin, Victoria and Robert Rodman. 1983. *An Introduction to Language*, 3rd Edition. New York: Holt.
- Grimes, Barbara F. 1996. *Ethnologue: Languages of the World*, 13th Edition. Dallas: Summer Institute of Linguistics.
- Malmkjær, Kirsten, ed. 1991. *The Linguistics Encyclopedia*. New York: Routledge.
- Nicolosi, Lucille, Elizabeth Harryman and Janet Kresheck. 1989. *Terminology of Communication Disorders: Speech, Language, Hearing*, 3rd Edition. Baltimore: Williams & Wilkins.
- O'Grady, William, Michael Dobrovolsky and Mark Aronoff. 1997. *Contemporary Linguistics: An Introduction*, 3rd Edition. New York: St. Martin's.
- Richards, Jack C., John Platt and Heidi Platt. 1992. *Dictionary of Language Teaching and Applied Linguistics*. Essex, UK: Longman.
- Ruhlen, Merritt, 1987. *A Guide to the World's Languages*. Stanford: Stanford University Press.
- Trask, R.L. 1993. *A Dictionary of Grammatical Terms in Linguistics*. New York: Routledge.
- Trask, R.L. 1996. *A Dictionary of Phonetics and Phonology*. New York: Routledge.