

M

macrolinguistics (*n.*) A term used by some LINGUISTS, especially in the 1950s, to identify an extremely broad conception of the subject of linguistic enquiry. In a **macrolinguistic** approach, LINGUISTICS is seen in its overall relation to PHONETIC and EXTRALINGUISTIC experience. It is divided into three main subfields: PRELINGUISTICS (whose primary subject-matter is PHONETICS), MICROLINGUISTICS (whose primary subject-matter is PHONOLOGY, MORPHOLOGY and SYNTAX) and METALINGUISTICS (whose subject-matter is the relationship between LANGUAGE and all extralinguistic features of communicative behaviour, e.g. including what would now be called SOCIOLINGUISTICS). Some sociolinguists (e.g. Joshua Fishman (b. 1926)) distinguish between the broad concerns of **macrosociolinguistics** (e.g. MULTILINGUALISM, language planning) and the detailed investigation of **micro-sociolinguistics** (e.g. speech events, conversations).

macroparadigm (*n.*) A term sometimes used in MORPHOLOGY for a set of PARADIGMS whose differences can be explained with reference to FORMAL criteria. An example would be a pair of paradigms where the PHONOLOGICAL differences in the SUFFIXES could be explained by showing that they are related through vowel HARMONY (as in Hungarian and Turkish).

macro-phylum (*n.*) see FAMILY

macrosociolinguistics (*n.*) see MACROLINGUISTICS

main (*adj.*) A term used in GRAMMATICAL analysis as part of the CLASSIFICATION of CLAUSE types; opposed to SUBORDINATE or DEPENDENT. A **main clause** is an independent clause, i.e. it can stand on its own as a SENTENCE. The term is also used to identify the more important STRUCTURAL member of a SEQUENCE of ITEMS all belonging to the same CLASS, e.g. 'main VERB' (*v.* AUXILIARY verb).

maintenance (*n.*) see LANGUAGE MAINTENANCE

major (*adj.*) (1) A term used by some LINGUISTS in the CLASSIFICATION of SENTENCE types to refer to the most PRODUCTIVE sentence patterns in a LANGUAGE. In English, the SUBJECT+PREDICATE (NP+VP) pattern is the **major sentence** (or

FAVOURITE) type, e.g. *The elephant is running, A book is on the table.* Other types may be referred to as MINOR.

(2) In some models of FEATURE GEOMETRY, a term which forms part of a binary PHONOLOGICAL distinction corresponding to the PHONETIC contrast between primary and SECONDARY ARTICULATION; opposed to **minor**. It is argued that, in CONSONANTS involving multiple articulations, only one degree of CLOSURE is distinctive (the 'major articulator'); the other is predictable (the 'minor articulator'), and thus its degree of closure need not be specified in the phonological REPRESENTATION.

major class feature One of the five main dimensions of classification in Chomsky and Halle's DISTINCTIVE FEATURE theory of PHONOLOGY (the others being CAVITY features, MANNER-OF-ARTICULATION features, SOURCE features and PROSODIC features). The term refers to the main types of sound produced by the open *v.* closed possibilities of VOCAL TRACT variation. There are three such features, all defined as OPPOSITIONS: SONORANT *v.* non-sonorant (OBSTRUENT), VOCALIC *v.* non-vocalic, and CONSONANTAL *v.* non-consonantal. Using these features, sounds can be subdivided into the major classes of VOWELS, CONSONANTS, OBSTRUENTS, SONORANTS, GLIDES and LIQUIDS. See CHOMSKYAN.

mandibular setting see JAW SETTING

manifestation (*n.*) A term used by some linguists to refer to the physical expression of an abstract LINGUISTIC UNIT, e.g. PHONEMES are **manifested** in PHONIC SUBSTANCE as PHONES, MORPHEMES as morphs. Any UNDERLYING FORM may be seen as having a corresponding manifestation in substance. In TAGMEMICS, the term has a special status, referring to the ETIC (physical) expression of EMIC (abstract) units (the **manifestation mode**). Elsewhere, the term REALIZATION is widely used.

manner (*n.*) (1) One of the main parameters in the PHONETIC or PHONOLOGICAL classification of speech sounds, referring to the kind of ARTICULATORY process used in a sound's production. The distinction between CONSONANT and VOWEL is usually made in terms of **manner of articulation**. Within consonants, several articulatory types are recognized, based on the type of CLOSURE made by the VOCAL ORGANS. If the closure is complete, the result is a PLOSIVE, AFFRICATE or NASAL. If the closure is partial, the result is a LATERAL. If the closure is intermittent, the result is a ROLL (TRILL) or FLAP. And if there is narrowing without complete closure the result is a FRICATIVE. Within VOWELS, classification is based on the number of auditory qualities distinguishable in the sound (PURE VOWEL, DIPHTHONG, TRIPHTHONG), the position of the soft PALATE and the type of lip position (see ROUNDING). Sounds which are vowel-like in manner of articulation, but consonantal in function, are classified as SEMI-VOWELS or FRICTIONLESS CONTINUANTS.

The term has special status in DISTINCTIVE FEATURE theory in PHONOLOGY, where it constitutes one of the five main dimensions in terms of which features of speech sound are analysed (the others being MAJOR CLASS FEATURES, CAVITY features, SOURCE features and PROSODIC features). The features subsumed under this heading, all analysed as OPPOSITIONS, are: CONTINUANT, RELEASE features (INSTANTANEOUS and DELAYED), SUPPLEMENTARY MOVEMENTS (SUCTION and PRESSURE) and TENSE.

(2) Several linguists use this term in the classification of LANGUAGE VARIETIES (more fully, **manner of discourse**), referring to the relations among the participants in a language activity, especially the LEVEL OF FORMALITY they adopt (colloquial, formal, etc.). Alternative labels which have been proposed for this area are STYLE or TENOR of discourse.

manner adverb(ial) A common term in GRAMMATICAL description, referring to an ADVERB or ADVERBIAL able to answer the question 'how?', e.g. *in an imposing manner, in a nice way, quickly, angrily*. Certain other SEMANTIC CLASSES of adverbial are closely related (e.g. instrument, means), and sometimes subsumed under the heading of manner. Some GENERATIVE linguists see adverbials of manner as particularly significant, proposing a relationship between them and the PASSIVE construction.

manner maxim A term identifying one of the MAXIMS OF CONVERSATION: the 'maxim of manner' states that a person's contribution to a conversation should ideally be perspicuous – for example, avoiding obscurity and AMBIGUITY.

manner of discourse see MANNER (2)

map (*v.*) see MAPPING

mapping (*n.*) This term, used to characterize a feature of MODEL construction in scientific enquiry, has been applied in several areas of LINGUISTICS and PHONETICS. Mapping refers to the correspondence between the ELEMENTS defined in a model of a situation, and the elements recognized in the situation itself. If these elements are in a one-to-one correspondence, at a given level of abstraction, then the mapping is said to be ISOMORPHIC; if there is a superficial or selective correspondence (again, at a given level of abstraction), the mapping is 'homomorphic'. For example, one could evaluate the extent to which an isomorphic relationship existed between SYNTACTIC and SEMANTIC LEVELS OF REPRESENTATION OF SENTENCE STRUCTURE. In TRANSFORMATIONAL GRAMMAR, the term is used specifically to refer to the process whereby a particular stage in the DERIVATION of a sentence is formally related to a subsequent stage, e.g. an input phrase is **mapped** by a set of transformations on to a derived PHRASE-MARKER.

marginal auxiliary see AUXILIARY (1)

marginally acceptable see ACCEPTABILITY

margins (*n.*) The collective term for the sound SEGMENTS which form the boundaries of a SYLLABLE centre (NUCLEUS). In the word *cup*, for example, the CONSONANTS [k] and [p] constitute the syllable margins, as opposed to the VOWEL, which constitutes the syllable CENTRE. See also EDGE.

markedness (*n.*) An analytic principle in LINGUISTICS whereby pairs of linguistic FEATURES, seen as OPPOSITIONS, are given different values of POSITIVE (**marked**) and NEUTRAL or NEGATIVE (**unmarked**). In its most general sense, this distinction refers to the presence versus the absence of a particular linguistic feature. There is

a formal feature marking plural in most English nouns, for example; the plural is therefore 'marked', and the singular is 'unmarked'. The reason for postulating such a relationship becomes clear when one considers the alternative, which would be to say that the opposed features simply operate in parallel, lacking any directionality. Intuitively, however, one prefers an analysis whereby *dogs* is derived from *dog* rather than the other way round – in other words, to say that '*dogs* is the plural of *dog*', rather than '*dog* is the singular of *dogs*'. Most of the theoretical discussion of markedness, then, centres on the question of how far there is intuitive justification for applying this notion to other areas of language (cf. *prince/princess*, *happy/unhappy*, *walk/walked*, etc.).

One of the earliest uses of the notion was in PRAGUE SCHOOL PHONOLOGY, where a sound would be said to be marked if it possessed a certain DISTINCTIVE FEATURE (e.g. VOICE), and unmarked if it lacked it (this unmarked member being the one which would be used in cases of NEUTRALIZATION). In GENERATIVE phonology, the notion developed into a central criterion for formalizing the relative NATURALNESS of alternative solutions to phonological problems. Here, evidence from frequency of occurrence, HISTORICAL LINGUISTICS and language ACQUISITION is used to support the view that marking is a basic principle for assigning UNIVERSAL (and possibly innate) values to PHONETIC features (by contrast with the language-specific, phonological approach of the Prague School). The distinctive features are each assigned marking values, e.g. [+voice] is seen as marked, [-voice] as unmarked. SEGMENTS, in this view, can then be seen as combinations of marked or unmarked features, and thus be compared with each other, e.g. /a/ is the maximally unmarked vowel because it is [-high], [-back] and [-round]; /ɔ/ is more complex because it is [+low] and [+round], and so on. In later phonological theory (e.g. in UNDERSPECIFICATION theory), the notion of markedness took on a critical status. Based on the view that the unmarked value of a feature is the normal, neutral state of the relevant articulator, some approaches assert that only one value need be present in the UNDERLYING REPRESENTATION; the other can be predicted by a CONTEXT-free RULE which mirrors the relevant markedness statement. For example, [] → [-nasal] would represent the notion that segments are normally oral. The rule would insert [-nasal] by default only in segments lacking a nasal value. Such rules are known as 'markedness based context-free redundancy rules'.

Several other interpretations of the notion of marking are found in the literature, where the concept of 'presence *v.* absence' does not readily apply. One interpretation relates marking to frequency of occurrence, as when one might say a FALLING INTONATION pattern was unmarked, compared with a RISING one, because it is more common. Another is found in the SEMANTIC analysis of LEXICAL ITEMS, where pairs of items are seen as unmarked and marked respectively, on the grounds that one member is more specific than the other (e.g. *dog/bitch*, where the latter is marked for sex – one can say *male/female dog*, but these ADJECTIVES are inapplicable with *bitch*). A third, related sense occurs when the DISTRIBUTION of one member of an opposition is restricted, compared with the other: the restricted item is then said to be marked – several COMPARATIVE SENTENCES illustrate this, e.g. *How tall is John?* (where *How short is John?* is abnormal). In later GENERATIVE linguistics, a more general **theory of markedness** emerged. Here, an unmarked property is one which accords with the general tendencies found in all languages; a marked property is one which goes against

these general tendencies – in other words, it is exceptional (a RELATIVE UNIVERSAL). Markedness in this sense can be represented as a continuum along which language-universal and language-specific properties can be related. A highly unmarked property is one which makes a strong claim to universal status; a highly marked property is one which makes a weak universal claim. A universal which is strongly represented in a particular language makes that language highly unmarked in that respect, and vice versa. For example, in relation to the proposed phonological universal that words must start with a consonant+vowel structure (CV), some languages (e.g. Yawelmani) totally satisfy this universal, whereas others (e.g. English) do not; English is therefore more marked than Yawelmani, in this respect. In OPTIMALITY THEORY, the RANKING OF CONSTRAINTS and constraint VIOLATIONS allows the notion of markedness to be encoded directly into the model.

marker (*n.*) (1) A term used in early GENERATIVE LINGUISTICS as part of a (controversial) two-way classification of the SEMANTIC COMPONENTS of LEXICAL ITEMS. Markers are those components of the meaning of a lexical item which are systematic for the language, i.e. the relations into which the item enters are systematic, in that the analysis of other lexical items makes reference to them. For example, [animate] is a marker, as can be seen by SELECTIONAL restrictions on the CO-OCCURRENCE of [+animate] lexical items with [–animate] ones, e.g. **the stone slept*. Components of meaning which do not operate in this way are called DISTINGUISHERS.

(2) In SOCIOLINGUISTICS, **marker** refers to a linguistic VARIABLE which conveys social import, people being aware of the distinction and associating it with groups within the speech community. An example is the contrast between short and long *a* in British English, in such words as *bath*. William Labov (b. 1927) distinguishes markers from INDICATORS and STEREOTYPES.

Markov process A term introduced into linguistics by Noam Chomsky in *Syntactic Structures* referring to the mathematical characterization of a FINITE-STATE GRAMMAR. A. A. Markov (1856–1922) was a Russian mathematician who helped to develop the theory of stochastic processes, introducing the notion of chained events (a **Markov chain**). See also AUTOMATON, HIDDEN MARKOV MODEL.

masculine (*adj.*) see GENDER

mass (*adj.*) A term used in the GRAMMATICAL classification of NOUNS; opposed to COUNT. The term refers to those nouns which the speaker treats as continuous entities, having no natural bounds (contrasting with the separable ‘countable’ quality of count nouns); but the distinction is not made on SEMANTIC grounds alone; the contrasting pattern of CO-OCCURRENCE with DETERMINERS, QUANTIFIERS, etc., is the main evidence, e.g. **an anger v. some anger* shows this to be a mass noun. There is no logical reason why nouns should be count or mass: a concept may be countable in one language, but mass in another, as in the case of *information*, which is mass in English, but countable in French (*des informations*).

matched guise A technique used in SOCIOLINGUISTICS to obtain information about unconsciously held LANGUAGE attitudes. The output of one person capable

of speaking in two 'guises' (authentically sounding alternative ACCENTS, DIALECTS or LANGUAGES) is presented to listeners who rate the speech in terms of such scales as intellectual capability and social solidarity. Because other variables (such as subject-matter) can be kept constant, the technique offers a larger measure of experimental control than is usual in sociolinguistic research.

matching (*n.*) A term used in GOVERNMENT-BINDING THEORY as a CONDITION required by the (sub-)theory of BINDING. The matching condition states that, if TWO NOUN PHRASES are ASSIGNED the same INDICES, their FEATURES (of NUMBER, GENDER, etc.) must be compatible.

material biconditional see MATERIAL CONDITIONAL

material conditional A sentential CONNECTIVE, standardly used in PROPOSITIONAL CALCULUS, and sometimes employed in the SEMANTIC analysis of CONDITIONAL and certain QUANTIFICATIONAL SENTENCES. A sentence consisting of two CLAUSES linked by this connective is true if the ANTECEDENT is false or the CONSEQUENT is true; and is false otherwise. The **material biconditional** is a related connective: a sentence consisting of two clauses connected by the material biconditional is true if the two clauses are identical in TRUTH VALUE, and false otherwise.

mathematical linguistics A branch of LINGUISTICS which studies the mathematical properties of LANGUAGE, usually employing concepts of a statistical or algebraic kind. A contribution has also come from INFORMATION theory (e.g. quantification of such notions as REDUNDANCY and FUNCTIONAL load) and from computational analysis (e.g. the use of ALGORITHMS). The main application of mathematical notions has been in the FORMALIZATION of linguistic theory, as developed in relation to GENERATIVE linguistics; but several other areas of language study have been investigated using these methods. Statistical studies of the DISTRIBUTION and frequency of linguistic ITEMS have led to the development of several empirical laws and specific techniques, e.g. in authorship studies (see stylostistics in STYLISTICS) and COMPARATIVE language study (see LEXICOSTATISTICS).

matrix (*n.*) (1) A term derived from mathematics to refer to a rectangular array of entities (usually symbols) made up of rows and columns, and used in all branches of LINGUISTICS as an aid in DESCRIPTION or analysis. In PHONOLOGY, for example, DISTINCTIVE FEATURES are usually described within a matrix, where the columns are SEGMENTS and the rows are features: the cells of the matrix are then filled with pluses or minuses (or, in some cases, zero) corresponding to whether a feature is or is not used.

(2) A term used in linguistics, and especially in GENERATIVE GRAMMAR, to refer to the superordinate SENTENCE within which another sentence is EMBEDDED, e.g. *The student who shouted left*, where *The student left* is the **matrix sentence**, and *The student shouted* is the embedded sentence.

(3) See SOURCE (4).

maximal-command (*v.*) see COMMAND (2)

maximality (*n.*) (**MAX**) A family of FAITHFULNESS CONSTRAINTS in OPTIMALITY THEORY requiring that every FEATURE or SEGMENT in the INPUT has an identical correspondent in the OUTPUT. DELETION is an example of a phenomenon which violates maximality. See also DEPENDENCE.

maximal onset principle see ONSET (1)

maxims of conversation A term derived from the work of the philosopher H. P. Grice (1913–88), and now widely cited in PRAGMATICS research. The maxims are general principles which are thought to underlie the efficient use of LANGUAGE, and which together identify a general CO-OPERATIVE PRINCIPLE. Four basic maxims are recognized. The **maxim of quality** states that speakers' contributions ought to be true – specifically, that they should not say what they believe to be false, nor should they say anything for which they lack adequate evidence. The **maxim of quantity** states that the contribution should be as informative as is required for the current purposes of the exchange, and should not be unnecessarily informative. The **maxim of relevance** states that contributions should be relevant to the purpose of the exchange. The **maxim of manner** states that the contribution should be perspicuous – in particular, that it should be orderly and brief, avoiding obscurity and AMBIGUITY. The ideas underlying the maxims have since been developed within RELEVANCE THEORY.

McGurk effect see AUDIO-VISUAL INTEGRATION

m-command see COMMAND (2)

meaning (*n.*) The basic notion is used in LINGUISTICS both as a datum and as a criterion of analysis: linguists study meaning, and also use meaning as a criterion for studying other aspects of LANGUAGE (especially through such notions as CONTRASTIVITY and DISTINCTIVENESS). The topic of 'meaning' in the context of language, however, necessitates reference to non-linguistic factors, such as thought, situation, knowledge, intention and use. It is the difficulty in drawing clear dividing-lines between such notions that indicates why so many other academic disciplines are involved in the study of meaning along with linguistics – philosophers and logicians especially, but also psychologists, sociologists, literary critics, theologians and others. Linguists' primary interests are distinguished by the attention they pay to the analysis of meaning (**meaningfulness, meaninglessness**) in the context of everyday speech (rather than, say, in the context of literature, or abstract reasoning), by their comparative interests (comparing the way meaning is structured in a range of languages, and how meaning changes over time), and by their attempt to integrate meaning with the other COMPONENTS of a general linguistic theory (especially with GRAMMAR). These emphases characterize the linguistic study of meaning, SEMANTICS. There was continuing debate, in the later decades of the twentieth century (especially in GENERATIVE grammar), about the place of semantics in relation to SYNTAX, when considering the DERIVATION of sentences.

Linguistics shares with other disciplines the concern to isolate the several factors which contribute to the total interpretation, or signification, of a message, as this provides the essential perspective within which the specifically intralinguistic properties of meaning can be identified. These factors – the 'meanings of meaning'

as they are sometimes called – have been variously labelled; and, while it is impossible to generalize about usage (in view of the many technical senses these labels have in various theories), labels do cluster around three major themes. When the emphasis is on the relationship between language, on the one hand, and the entities, events, states of affairs, etc., which are external to speakers and their language, on the other, terms such as ‘REFERENTIAL/DESCRIPTIVE/DENOTATIVE/EXTENSIONAL/factual/objective meaning’ have been used. When the emphasis is on the relationship between language and the mental state of the speaker, two sets of terms are used: the personal, emotional aspects are handled by such terms as ‘ATTITUDINAL/AFFECTIVE/CONNOTATIVE/EMOTIVE/EXPRESSIVE meaning’; the intellectual, factual aspects involve such terms as ‘COGNITIVE/IDEATIONAL meaning’. When the emphasis is on the way variations in the EXTRA-LINGUISTIC situation affect the understanding and interpretation of language, terms such as ‘CONTEXTUAL/FUNCTIONAL/interpersonal/social/SITUATIONAL’ have been used. ‘Contextual’, along with ‘TEXTUAL meaning’, is also used to refer to those factors which affect the interpretation of a sentence which derive from the rest of the DISCOURSE or TEXT within which the sentence occurs. Within linguistics, the role each linguistic LEVEL plays in the total interpretation of a sentence is often referred to as the ‘meaning’ of that level. The main levels involved are **lexical meaning** the meaning of LEXICAL ITEMS; and **grammatical meaning** (or **structural meaning**), the meaning of GRAMMATICAL structures. This approach has been extended by some linguists (e.g. FIRTHIANS) to include other linguistic levels, e.g. **phonetic meaning** (see SOUND-SYMBOLISM), **phonological meaning** (as in the structural use of alliteration or rhyme in poetry). The term **semantic meaning** may be used whenever one wants to emphasize the content, as opposed to the form or reference, of linguistic units. Specific aspects of the content of sentences may be singled out for special attention, e.g. the notion of ‘PROPOSITIONAL meaning’. A **meaning postulate** is a notion used in MODEL-THEORETIC SEMANTICS which restricts the possible interpretations of an object language (L) by describing lexical meanings in terms of analytically true sentences in L (see POSTULATE).

meaning-changing/meaning-preserving A theoretical distinction introduced in early GENERATIVE GRAMMAR between two types of TRANSFORMATIONS. If the operation of a transformation involves a change in the MEANING between input and DERIVED SENTENCES, the transformation is said to be ‘meaning-changing’; in ‘meaning-preserving’ transformations, there is no such change (see KATZ-POSTAL HYPOTHESIS). An example of the former would be in deriving IMPERATIVE sentences from an UNDERLYING (DECLARATIVE) STRUCTURE by using a *you*-DELETION transformation (e.g. *see* from *you see*); here is a plain contrast between declarative and imperative ‘meanings’, and the reason for the appearance of this contrast in the grammar is the use of the transformation. On the other hand, if the imperative is derived from an underlying structure where its ‘imperativeness’ has been represented, then the application of the *you*-deletion transformation would no longer change the structure’s meaning, but simply make tangible an element of meaning which was already present (viz. *Imp. + see* → *see*). Other examples of meaning-changing transformations include NEGATIVE placement (e.g. *Not much shrapnel hit the soldier v. Much shrapnel did not hit the soldier*) and subject raising (e.g. *It is certain that nobody will pass the test v. Nobody is certain to pass the test*).

meaning postulate see MEANING

mean length of utterance (MLU) A measure introduced by the American psychologist Roger Brown (b. 1925) into LANGUAGE ACQUISITION studies, which computes the LENGTH of an UTTERANCE in terms of MORPHEMES. The technique is then used to show the increasing length of a child's utterances over time, as a base-line for carrying out studies on the developmental complexity of SENTENCE STRUCTURE.

medial (*adj.*) (**med**) The usual way of referring to an ELEMENT occurring within a LINGUISTIC UNIT, other than in INITIAL and FINAL positions. The term is especially used in PHONOLOGY, e.g. the PHONEME /i/ occurs 'in medial position' (or 'medially') in the word *seat*.

medium (*n.*) A term used in the study of COMMUNICATION to refer to the functionally distinct dimensions in which a message is transmitted. In LINGUISTICS, the basic media are speech and writing, but others are not excluded (e.g. signing). Of these, speech is generally held in linguistics to be the 'primary medium', writing the 'secondary' or 'derived' medium, and the analysis of the differences between these media in STRUCTURAL and FUNCTIONAL terms is an important topic in linguistics. The term is usually distinguished from **channel** (as used in communication theory), which refers to the physical means whereby a (spoken or written) message is transmitted, such as a wire, air, light, etc.

mel (*n.*) see PITCH

mellow (*adj.*) One of the features of sound set up by Jakobson and Halle (see JAKOBSONIAN) in their DISTINCTIVE FEATURE theory of PHONOLOGY, to handle variations in PLACE OF ARTICULATION; its opposite is STRIDENT. Mellow sounds are defined ARTICULATORILY and ACOUSTICALLY, as those involving a less complex or 'smooth-edged' CONSTRICTION at the point of articulation, and marked by acoustic energy of relatively low FREQUENCY and intensity, compared with strident sounds. PLOSIVES and NASALS are examples.

melodic tier In some models of NON-LINEAR PHONOLOGY, a term referring to a level in a PROSODIC HIERARCHY at which ARTICULATORY GESTURES can be REPRESENTED, distinct from SKELETAL or SYLLABIC tiers. For example, a LONG VOWEL would be analysed as a single melody unit but would occupy two slots at the skeletal tier; and a CONTOUR segment would occupy a single skeletal slot but correspond to two articulatory gestures at the melodic tier. Several other items have also been used as names for this level of representation (see TIER).

mentalese (*n.*) In LINGUISTICS, the concepts, and combinations of concepts, postulated as a 'language of thought' (LOT), differing in various ways from the GRAMMAR of natural language. A thought, in this context, is conceived as an intentional state of mind representing something about the world, including the various beliefs, hopes, and other PROPOSITIONAL attitudes held by the thinker. The approach is of special relevance in COMPUTATIONAL LINGUISTICS, where mental processes can be modelled as sequences of mental states and transitions.

mentalism (*n.*) In LINGUISTICS, the influence of this school of thought (that mental states and processes exist independently of their manifestations of behaviour, and can explain behaviour) is most marked in the work of Noam Chomsky, especially in his notions of COMPETENCE and INNATENESS, and in his general views of the relationship between LANGUAGE and mind. In this respect, **mentalistic linguistics** is opposed to the BEHAVIOURISM of earlier psychological work on language. See CHOMSKYAN.

mental lexicon see LEXICON

mereology (*n.*) In SEMANTICS, a term derived from logic for the study of the relationship between parts and wholes. It is especially used in the context of LATTICE frameworks. Some linguists, especially in STRUCTURAL semantics, make use of the term MERONYMY for the same relationship.

merger (*n.*) A term used in LINGUISTICS, especially in HISTORICAL LINGUISTICS, to refer to the coming together (or CONVERGENCE) of linguistic UNITS which were originally distinguishable. In cases of two PHONEMES coming together, the phrase **phonemic merger** is often used (the opposite phenomenon being referred to as 'phonemic split'). For example, the /æ:/ and /e:/ vowels in Old English have now **merged** in modern English /i:/, as in *meet* and *clean*. Analogous terms include COALESCENCE, FUSION and NEUTRALIZATION.

merging (*n.*) In the MINIMALIST PROGRAMME, an operation which forms larger units out of those already constructed. Specifically, **merge** is a process which combines LEXICAL elements in the NUMERATION with partial TREES – a basic operation, along with MOVE, in the process of tree construction.

meronymy (*n.*) A term used in SEMANTICS as part of the study of the SENSE relations which relate LEXICAL ITEMS. Meronymy is the relationship which obtains between 'parts' and 'wholes', such as *wheel* and *car* or *leg* and *knee*. 'X is a part of Y' (= X is a **meronym** of Y) contrasts especially with the 'X is a kind of Y' relationship (HYPONYMY). The complementary relationship is **holonymy** (= Y is a **holonym** of X). See also MEREOLGY.

mesolect (*n.*) A term used by some SOCIOLINGUISTS, in the study of the development of CREOLE languages, to refer to the intermediate linguistic VARIETY (or LECT) falling between ACROLECT and BASILECT. Because of the range of variation covered by this notion, a further distinction is often drawn between the 'upper' mesolect (i.e. that closest to the acrolect), the 'lower' mesolect (i.e. that closest to the basilect) and the 'mid' mesolect (equidistant from the two); but the extent to which **mesolectal** distinctions can be drawn in a non-arbitrary way is disputed.

metadiscourse (*n.*) A term used in the study of DISCOURSE for those features in the organization or presentation of a text which help the reader to interpret or evaluate its content. They include features of textual organization (e.g. headings, spacing, and connectives such as *first* and *next*) as well as such interpersonal elements as HEDGES (*perhaps*), attitude markers (*frankly*) and dialogue features (for example, 'see Figure 1').

metagrammar (*n.*) A term used in LINGUISTIC theory to refer to a GRAMMAR which contains a set of METARULES.

metalanguage (*n.*) (1) LINGUISTICS, as other sciences, uses this term in the sense of a higher-level language for describing an object of study (or ‘object language’) – in this case the object of study is itself language, viz. the various language samples, INTUITIONS, etc., which constitute our linguistic experience. The subject of this dictionary is **linguistic metalanguage**. **Metalinguistics** is the study of metalanguage, in this general sense. Other ‘meta’ notions will also be encountered, such as METARULE and METADISOURSE. See also LANGUAGE AWARENESS.

(2) The general term **metalinguistics** has a more specific sense within linguistics, where some linguists have used it, especially in the 1950s, to refer to the overall relation of the linguistic system to the other systems of behaviour in the associated culture (compare the similar notion of CONTEXT OF SITUATION). In this view, only such a total account will constitute the full statement of the MEANINGS of the linguistic FORMS.

metalinguistic (*adj.*) In SEMANTICS and PRAGMATICS, a term sometimes applied to OPERATORS, PREDICATES, etc. when referring to non-semantic features of the EXPRESSIONS they combine with, such as their PHONETIC or MORPHOLOGICAL FORM. An example is provided by **metalinguistic negation**, in which the word *not* is not used in its usual TRUTH FUNCTIONAL sense, but instead registers an objection to such features as the pronunciation or style of a previous or hypothetical utterance.

metanalysis (*n.*) A term sometimes used in HISTORICAL LINGUISTICS, referring to the formation of a new LEXICAL item through a wrong analysis of an existing word boundary; for example in early English *a naddre* came to be heard in the popular mind as *an adder*, which has become the modern form. It is a kind of folk ETYMOLOGY.

metaphony (*n.*) A term used in PHONOLOGY for a process of ASSIMILATION which affects non-adjacent VOWELS in a word. The notion thus subsumes such processes as vowel HARMONY and the type of phonological change which takes place when a vowel changes its quality under the influence of a following vowel (‘umlaut’), and is used both in SYNCHRONIC and DIACHRONIC contexts.

metaphor (*n.*) see COGNITIVE METAPHOR

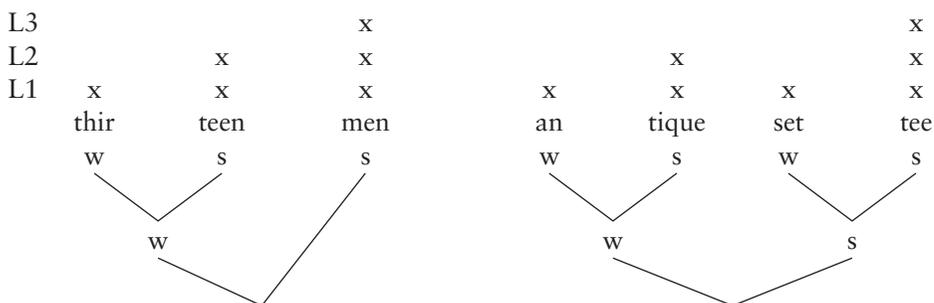
metarule (*n.*) A term used in LINGUISTIC theory to refer to a type of RULE which defines some rules in a GRAMMAR on the basis of the properties of others already present in the grammar. Metarules are particularly important in GENERALIZED PHRASE-STRUCTURE GRAMMAR, where they derive IMMEDIATE DOMINANCE rules from immediate dominance rules. They allow the capturing of certain GENERALIZATIONS which are handled by TRANSFORMATION in transformational grammar; for example, the relation between active and PASSIVE sentences is captured by a metarule deriving rules for passive VPs from rules for active VPs. Metarules, it has been said, in effect provide a grammar which can be used for generating a grammar – in other words, a METAGRAMMAR.

metathesis (*n.*) A term used in LINGUISTICS to refer to an alteration in the normal SEQUENCE of ELEMENTS in a SENTENCE – usually of sounds, but sometimes of SYLLABLES, WORDS or other UNITS. **Metatheses** are well recognized in HISTORICAL LINGUISTICS (e.g. Old English *brid* becoming *bird*), but they can also be seen in PERFORMANCE ERRORS – in such TONGUE-SLIPS as *aks* for *ask*, or in the phenomenon of ‘spoonerisms’ (cf. *the dear old queen* becoming *the queer old dean*).

metonymy (*n.*) A term used in SEMANTICS and STYLISTICS, referring to a figure of speech in which the name of an attribute of an entity is used in place of the entity itself. People are using **metonyms** when they talk about *the bottle* (for the drinking of alcohol) or *the violins* (in *The second violins are playing well*).

metric (*n.*) see SIMPLICITY

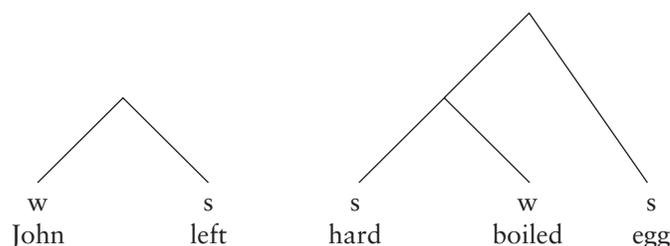
metrical grid A FORMALISM used in some approaches to METRICAL PHONOLOGY to display HIERARCHIC patterns of SYLLABIC PROMINENCE, presented graphically in columns (for relative prominence) and rows (for rhythmical structure). Each syllable is assigned a position on a metrical grid, strong syllables being assigned progressively higher layers in the grid. For example, the grids for *thirteen men* and *antique settee* would be:



At the bottom layer (L1), or row, each TERMINAL NODE of the TREE is aligned with a grid placeholder (marked by x); this layer is the grid’s **terminal set**. A second layer is used to reflect the relative strength of *-teen* and *men*, as opposed to *thir-*; and a third layer is used to reflect the relative strength of *men* as opposed to *-teen* (*w* = weak, *s* = strong). Grid elements at the same layer are said to be ‘adjacent’. Adjacent elements are ‘alternating’ if, at the next lower layer, the elements corresponding to them (if any) are not adjacent (as in the *antique settee* example); they are ‘clashing’ if their counterparts one layer down are adjacent (as in the *thirteen men* example). The relationship between trees and grids proved controversial: some phonologists argued that the formalisms are equivalent, and that only grids need be represented (an ‘autonomous’ grid, ‘grid-only’ phonology); some argued that only trees need be represented (‘tree-only’ phonology); and some argued that both are required, because they have different functions (trees representing STRESS, grids representing RHYTHM). Grid construction is carried out using a set of PARAMETERS (e.g. QUANTITY SENSITIVITY). The rhythmical basis of the grid is provided by the rule of **perfect grid**: a foot-layer mark is added

on top of alternating syllable-layer marks. **Bracketed grid theory** is a metrical grid with CONSTITUENCY markers added, introduced to formalize a constituent structure view of rhythm. Various notations have been proposed.

metrical phonology (MP) A theory of PHONOLOGY in which phonological STRINGS are REPRESENTED in a HIERARCHICAL manner, using such notions as SEGMENT, SYLLABLE, FOOT and WORD (see also PROSODIC phonology). Originally introduced as a hierarchical theory of STRESS, the approach developed to cover the whole domain of syllable structure and phonological boundaries. Stress patterns are considered to reflect, at least in part, relations of PROMINENCE between SYNTACTIC and MORPHOLOGICAL CONSTITUENTS. The UNDERLYING metrical STRUCTURE of words and PHRASES may be represented in the form of a metrical TREE, whose NODES reflect the relative metrical strength between SISTER constituents, as in the following examples (*w* = weak, *s* = strong):



Patterns of syllabic prominence can also be formally represented through the use of METRICAL GRIDS. Later developments of the theory represent phonological relations in terms of PARAMETERS.

metrics (*n.*) The traditional sense of this term – the study of versification – is interpreted in LINGUISTICS as the analysis of metrical structure using the whole range of linguistic techniques, especially those belonging to SEGMENTAL and SUPRASEGMENTAL PHONOLOGY. It has developed a special sense in the context of METRICAL PHONOLOGY.

metropolitanization (*n.*) see CREOLE

microlinguistics (*n.*) A term used by some linguists, especially in the 1950s, to refer to the main areas of LINGUISTICS, especially PHONOLOGY, MORPHOLOGY and SYNTAX, these being seen as constituting a sharply defined field of study differentiable from PRELINGUISTICS and METALINGUISTICS. In this frame of reference, it was seen as a branch of MACROLINGUISTICS. More broadly, the term can be used to distinguish complementary views of a subject, one being strictly linguistic, the other being wider; for example, a study of MEANING which concentrates on DENOTATIVE meaning and does not take SOCIOLINGUISTIC, etc., factors into account might be called **microlinguistic** (as opposed to ‘macrolinguistic’) semantics.

The term ‘microlinguistic’ is sometimes used outside this framework in a general sense, to refer to any analysis of linguistic data involving a maximum depth of detail. Likewise, the term **microsociolinguistic** (opposed to ‘macro-’) is sometimes found.

microsociolinguistics (*n.*) see MACROLINGUISTICS, MICROLINGUISTICS

mid (*adj.*) (1) A term used in the threefold PHONETIC classification of vertical TONGUE movement in VOWEL sounds, the others being HIGH and LOW. It refers to vowels made in the middle area of ARTICULATION, as in *get*, *say*, *go* or *got*. Relatively high mid-vowels are sometimes described as **mid-close**; relatively low mid-vowels as **mid-open**. See also CLOSE (1), OPEN (1).

(2) See TONE (1).

middle voice see VOICE (2)

minimal-distance principle (MDP) A term used in PSYCHOLINGUISTICS, referring to a principle assumed to be generally applicable in the analysis of COMPLEMENT structures of the type *Mary wants Jim to go*, where the SUBJECT of the complement CLAUSE is *Jim*, i.e. the nearest NOUN PHRASE to the left of the complement VERB. Most complement-taking verbs conform to this principle (e.g. *like*, *hope*, *make*), which is used especially in child language studies to explain apparent anomalies in the ACQUISITION of complements and other similar types of STRUCTURE. For example, in *Mary promised Jim to go*, the subject of *go* is *Mary*: this breaks the minimal-distance principle, and it is hypothesized that children will have greater difficulty learning structures involving such verbs, since they constitute exceptions to the general rule.

minimal free form A term introduced into LINGUISTICS by Leonard Bloomfield (see BLOOMFIELDIAN) as part of his definition of WORD. The phrase can be glossed as 'the smallest linguistic FORM which can stand on its own as an UTTERANCE'.

minimalist program/programme (MP) A development in GENERATIVE linguistic thinking, which emphasizes the aim of making statements about language which are as simple and general as possible. All REPRESENTATIONS and DERIVATIONAL processes should be as ECONOMICAL as possible, in terms of the number of devices proposed to account for language phenomena (the **principle of economy**) – in effect, an application of Occam's razor. There should be no REDUNDANT or superfluous elements in the representation of sentence structure: each element must play a role and must be interpreted (the **principle of full interpretation**). The four LEVELS of representation recognized in standard GOVERNMENT-BINDING THEORY (D-structure, S-structure, logical form (LF) and phonetic form (PF)) are reduced to two: LF and PF, referred to as INTERFACE levels. Minimally, the mapping of sounds to meanings requires no more than a lexicon and a computational (SYNTACTIC) procedure which gives lexical elements a PHONOLOGICAL and a SEMANTIC identity. The grammar is modelled as a COMPUTATIONAL SYSTEM containing a NUMERATION of LEXICAL items, to which operations of MOVE and MERGE apply in order to build up a STRUCTURAL DESCRIPTION. All INFLECTED words are formed in the lexicon. Operations are driven by MORPHOLOGICAL necessity, with features being checked for their applicability. Economy constraints, such as PROCRASTINATE and GREED, are used to compare derivations involving the same lexical resources and reject those which do not conform. The derivation eventually splits into phonetic and semantic representations (following SPELL-OUT),

which must CONVERGE to produce grammatical sentences. See also LAST RESORT, LEAST EFFORT.

minimality (*n.*) A term which is widely used in recent LINGUISTICS, especially as part of the discussion of the FORMAL properties of REPRESENTATIONS. For example, in GENERATIVE phonology, **lexical minimality** assumes that UNDERLYING representations must reduce to some minimum the phonological information used to distinguish LEXICAL items. The notion of a **minimal word** is required in some models of NON-LINEAR PHONOLOGY. In PROSODIC MORPHOLOGY, for instance, a 'prosodic word' must satisfy a **minimality condition**: according to the prosodic HIERARCHY, any instance of a prosodic word must contain at least one FOOT, and every foot must contain at least two **moras** (in QUANTITY sensitive languages) or two SYLLABLES (in quantity insensitive languages). A **minimality condition** is also defined in GOVERNMENT-BINDING THEORY, formalizing the view that an element governed by one relationship will not be governed by another; in terms of a theory of BARRIERS, NODES become barriers for an element if they immediately DOMINATE the nearest GOVERNOR of that element. **Relativized minimality** is the view that what counts as a governor is related to what is being governed: an element will minimally govern its TRACE if there is no other typical potential governor that is closer to the trace.

minimal link condition see MOVEMENT (1)

minimal pair One of the DISCOVERY PROCEDURES used in PHONOLOGY to determine which sounds belong to the same class, or PHONEME. Two WORDS which differ in meaning when only one sound is changed are referred to as a 'minimal pair', e.g. *pin v. bin*, *cot v. cut*, and linguists or native speakers who make these judgements are said to be carrying out a **minimal pair test**. A group of words differentiated by each having only one sound different from all others, e.g. *big*, *pig*, *rig* . . . is sometimes called a **minimal set**.

minimal set see MINIMAL PAIR

minor (*adj.*) (1) A term used by some LINGUISTS in the classification of SENTENCE types to refer to a sentence (a **minor sentence**) with limited PRODUCTIVITY (e.g. *Please*, *Sorry*) or one which lacks some of the CONSTITUENTS of the LANGUAGE's MAJOR (or FAVOURITE) sentence type (e.g. VOCATIVES, ELLIPTICAL CONSTRUCTIONS).

(2) For **minor articulation** in FEATURE geometry, see MAJOR (2).

minority language A LANGUAGE used in a country by a group which is significantly smaller in number than the rest of the population; also called a **linguistic minority** or **language minority**. Those who speak the language may be nationals of the country, but they have distinguishing ethnic, religious or cultural features which they wish to safeguard. Most countries have several minority languages within their borders.

misderivation (*n.*) A term used by some PSYCHOLINGUISTS to refer to a type of TONGUE-SLIP where the wrong AFFIX is attached to a WORD, as in *kingness* for *kingship*.

mismatch (*n.*) see OVERLAPPING (2)

misrelated participle see DANGLING PARTICIPLE

mistake (*n.*) see ERROR (2)

MIT The abbreviation for Massachusetts Institute of Technology, used in LINGUISTICS as a label characterizing GENERATIVE linguistic theory and method. The 'MIT school' is so called because of the influence of the work of Noam Chomsky and his associates at MIT since the late 1950s. See CHOMSKYAN.

mixing (*n.*) see CODE

M-level (*n.*) see HARMONIC PHONOLOGY

MLU see MEAN LENGTH OF UTTERANCE

modal (*adj.*) (1) A term used in PHONETICS to characterize the neutral or UNMARKED state of the vibrating GLOTTIS, to which all other phonatory states can be compared. **Modal voice** lacks any features of BREATHY voice, CREAK, whisper, etc. The chest REGISTER is also referred to as the **modal register**.

(2) See MODALITY.

modal auxiliary/verb see MOOD

modal base In POSSIBLE-WORLDS analyses of MODALITY, a term referring to the set of worlds over which one must quantify in the interpretation of a modal sentence. It is usually understood to be established at least partly on a PRAGMATIC basis.

modality (*n.*) A term used in GRAMMATICAL and SEMANTIC analysis to refer to contrasts in MOOD signalled by the VERB and associated categories. In English, **modal** contrasts are primarily expressed by a subclass of AUXILIARY verbs, e.g. *may, will, can*. This subclass is symbolized as **M** in the PHRASE-STRUCTURE RULES of a GENERATIVE grammar. Modal verbs share a set of morphological and syntactic properties which distinguish them from the other auxiliaries, e.g. no *-s*, *-ing*, or *-en* forms. In CASE grammar, **modality** refers to one of the two major CONSTITUENTS of a sentence's DEEP STRUCTURE, the other being PROPOSITION.

modal subordination A term used in SEMANTIC and PRAGMATIC theory for a pattern of interpretation in which a SENTENCE containing a MODAL AUXILIARY is interpreted as though it were CONJOINED to the CONSEQUENT CLAUSE of a CONDITIONAL sentence present implicitly or explicitly in the preceding DISCOURSE. An example is *If John bought a book, he'll be home reading it by now. It'll be a murder mystery*. Modal subordination poses a challenge for certain theories of ANAPHORA.

mode (*n.*) (1) A term used in the HALLIDAYAN classification of LANGUAGE VARIETIES, referring to the MEDIUM of the language activity which determines the

role played by the language in a situation. Mode (more fully, **mode of discourse**) primarily includes the choice of speech *v.* writing (along with other possible subdivisions, such as reading aloud, speech from notes, etc.), but also includes choice of format (as in newspapers, commentary, poetry, etc.). The main terms with which it contrasts are **FIELD** and **STYLE**.

(2) A term used in **TAGMEMIC** analysis to label the various dimensions recognized by the theory, e.g. the distinction between **PHONOLOGICAL**, **LEXICAL** and **GRAMMATICAL** ‘modes’ (which constitute the main components of the theory), and between **FEATURE**, **MANIFESTATION** and **DISTRIBUTION** ‘modes’ (which are used to handle the **UNITS** of linguistic description).

(3) See **MOOD**.

model (*n./v.*) (1) This central notion of scientific enquiry has been applied in several areas of **LINGUISTICS** and **PHONETICS**. A model is a specially designed representation of concepts or entities, used to discover or explain their structure or function. All models involve the **MAPPING** in a new conceptual dimension of a set of **ELEMENTS** recognized in the situation being modelled. For example, the **PHONOLOGIST** builds models of the organization of the speech continuum, using such contrasts as **PHONEMES** (sc. the ‘phonemic model of analysis’) or **DISTINCTIVE FEATURES** (sc. the ‘distinctive feature model’); the **GRAMMARIAN** uses **TREE** diagrams, **BRACKETS** and other such devices to help model **SYNTACTIC STRUCTURE**. One of the earliest uses of the term in linguistics was by the American linguist, Charles Hockett (1916–2000), in a discussion of models of **DESCRIPTION** in **MORPHOLOGY** – a distinction being made between the ‘**ITEM-AND-ARRANGEMENT** model’ and the ‘**ITEM-AND-PROCESS** model’ (and later, the ‘**WORD-AND-PARADIGM** model’). In discussion of **GENERATIVE** grammar, and related developments in linguistic theory, the term is often used in the sense of ‘formal representation of a theory’, as when one contrasts the ‘*Syntactic Structures* model’ of generative grammar with the ‘*Aspects* model’. Sometimes, though, the term ‘model’ is used synonymously with ‘theory’ by some authors; usage is not entirely consistent. However, there is now increasing awareness of the role of models in linguistic enquiry, and of their strengths and limitations in generating testable hypotheses.

(2) In several areas of **APPLIED LINGUISTICS**, one encounters the traditional sense of a **model** as someone or something used as an exemplar of a level of language achievement. For example, foreign-language teaching may use a **NATIVE-SPEAKER**, or a **STANDARD DIALECT**, as a model of the language to be learned; speech therapists may use themselves as models for language-disordered patients; English teachers may use a certain piece of writing as a model of attainment for their class.

model-theoretic semantics A version of **TRUTH-CONDITIONAL SEMANTICS** developed by Richard Montague (1930–71) and others. A class of **MODELS** is defined for each **LANGUAGE**, and **RULES** are formulated assigning **TRUTH VALUES** to **SENTENCES** relative to each model. Such notions as **LOGICAL CONSEQUENCE** and **LOGICAL TRUTH** may then be defined by quantifying over the models relative to which given sentences are true. Typically, a model consists of three components: (a) a set of individuals, taken to constitute the domain of **DISCOURSE**; (b) an arbitrary number of world–time pairs; and (c) an assignment of an **EXTENSION** for each **LEXICAL** item relative to each world–time pair.

modification (*n.*) (1) A term used in SYNTAX to refer to the STRUCTURAL dependence of one GRAMMATICAL UNIT upon another – but with different restrictions in the scope of the term being introduced by different approaches. Some reserve the term for structural dependence within any ENDOCENTRIC PHRASE; e.g. in *the big man in the garden*, both *the big* and *in the garden* **modify** *man* – PREMODIFICATION and POST-modification respectively. Some LINGUISTS reserve the term for the premodifying structures only: in HALLIDAYAN grammar, for example, the above phrase would have the structure M–H–Q, standing for modification–HEAD–QUALIFICATION. TRADITIONAL grammar reserved the term for ADVERBIAL units which were dependent on the VERB, and this tradition is sometimes encountered.

(2) **Modification** is also used in MORPHOLOGY to refer to a process of change within the ROOT or STEM of a FORM, as in the VOWEL changes between the singular and plural of some nouns in English (*man* ~ *men*), or in cases of SUPPLETION. In this, and related senses, the term is also found in HISTORICAL LINGUISTICS.

(3) In PHONETICS, factors which influence the airflow in the VOCAL TRACT are often referred to as **modifications**, e.g. the movement of the soft PALATE, the degree of CLOSURE of the GLOTTIS. The term is also sometimes used to refer to any factors which alter the typical actions of the VOCAL ORGANS in producing the PHONEMES of a language, as in PROSODIC features, SECONDARY ARTICULATIONS and TRANSITIONS between sounds.

(4) Also in phonetics, the range of DIACRITIC marks which indicate variations in VOWEL and CONSONANT quality are referred to as **modifiers**, in the INTERNATIONAL PHONETIC ALPHABET.

modifier (*n.*) see MODIFICATION (4)

modularity (*n.*) A term used in discussions of LANGUAGE in two slightly different ways. On the one hand, it is proposed, especially in J. A. Fodor's *The Modularity of Mind* (1983), that the mind is **modular** in the sense that it consists of a number of different systems (**modules**) each with its own distinctive properties, such as the language system and the vision system. On the other hand, it is suggested, especially in GOVERNMENT-BINDING THEORY, that the language system itself is modular in the sense that it consists of a number of different subsystems which interact in specific ways.

modulation (*n.*) A term sometimes used in LINGUISTICS to refer to the SUPRA-SEGMENTAL alterations introduced into an UTTERANCE for a particular attitudinal or social effect, e.g. whispering, shouting.

module (*n.*) see MODULARITY

monadic (*adj.*) see VALENCY

mono- A PREFIX used in PHONETICS and LINGUISTICS when one wants to contrast the unitary manifestation of a linguistic concept with a multiple one. Examples of this contrast are: **monosyllabic** words (or 'monosyllables') *v.* POLY-SYLLABLES; **monomorphemic** words (i.e. consisting of a single MORPHEME) *v.* bimorphemic, etc.; **monosystemic** PHONOLOGY (consisting of a single SYSTEM of

PHONEMES) *v.* POLYSYSTEMIC; **monosemy** (consisting of a single MEANING) *v.* POLYSEMY; and so on.

monogenesis (*n.*) In HISTORICAL LINGUISTICS, the hypothesis that all human LANGUAGES originate from a single source; contrasts with **polygenesis**, where language is thought to have emerged more or less spontaneously in several places. The terms are also used in discussing the similarities among PIDGINS and CREOLES: **monogenetic** theories assume the diffusion of a single pidgin to other areas via migration; **polygenetic** theories assume that the development of a pidgin in one community is independent of the development of a pidgin in another.

monolingual (*adj./n.*) see BILINGUAL, MULTILINGUAL

monomoraic (*adj.*) see MORA

monomorphemic (*adj.*) see MORPHEME

monophthong (*n.*) A term used in the PHONETIC classification of VOWEL sounds on the basis of their MANNER OF ARTICULATION: it refers to a VOWEL (a PURE VOWEL) where there is no detectable change in quality during a SYLLABLE, as in English *cart*, *cut*, *cot*. Vowels which change in quality are known as DIPHTHONGS (or TRIPHTHONGS). In some DIALECT and DIACHRONIC studies, a process of **monophthongization** can be found, i.e. a change in VOWEL QUALITY from a diphthong to a monophthong.

monosemy (*n.*) see POLYSEMY

monostratal (*adj.*) A term sometimes used in LINGUISTIC theory to refer to a GRAMMAR which contains only a single LEVEL OF REPRESENTATION (roughly equivalent to the TRANSFORMATIONAL notion of SURFACE STRUCTURE). The contrast is intended with GENERATIVE grammars which recognize more than one level – typically, DEEP STRUCTURE as well as surface structure.

monosyllabic (*adj.*) see POLYSYLLABLE

monosystemic (*adj.*) see POLYSYSTEMICISM

monotone (*n.*) A term used in GENERALIZED QUANTIFIER THEORY to refer to a SEMANTIC property of NOUN PHRASES. A noun phrase is considered to be **monotone increasing** if, whenever a set is in its DENOTATION, all its supersets will also be in its denotation. This has the effect that a sentence containing the noun phrase as SUBJECT will systematically ENTAIL all sentences obtained by replacing the VERB PHRASE with a HYPERNYM. For example, *Every dog* is monotone increasing, so the sentence *Every dog walks* entails *Every dog moves*. The reverse pattern is observed with **monotone decreasing** noun phrases: *No dog* is monotone decreasing, so *No dog moves* entails *No dog walks*. This terminology is sometimes extended to DETERMINERS, in which case the terms **left monotone increasing/decreasing** and **right monotone increasing/decreasing** are used to distinguish **monotonicity** properties based on the determiner's common noun and

verb phrase arguments, respectively. See also the notions of ‘upward/downward entailing’ in ENTAILMENT.

monotransitive (*adj.*) see TRANSITIVITY

monovalent (*n.*) see PRIVATIVE (2), VALENCY

Montague grammar A movement in LINGUISTIC theory in the mid-1970s which owes its impetus to the thinking of the American logician Richard Montague (1930–71). The approach uses a conceptual apparatus derived from the study of the SEMANTICS of FORMAL (logical) LANGUAGES, and applies it to the analysis of natural languages. The GRAMMAR contains a SYNTACTIC and a SEMANTIC COMPONENT, which are strictly related, in that there is a one-to-one correspondence between CATEGORIES set up at the two levels. The syntax is introduced through CATEGORIAL RULES which define syntactic categories. The corresponding semantic rules construct a PROPOSITIONAL interpretation of these sentences, using the notions of truth-conditional predicate logic. The approach has been modified and extended in several ways – notably in relation to GENERALIZED PHRASE-STRUCTURE GRAMMAR. Approaches showing Montague’s influence are sometimes characterized as ‘Montagovian’.

mood (*n.*) A term used in the theoretical and descriptive study of SENTENCE/ CLAUSE types, and especially of the VERBS they contain. Mood (**modality**, or **mode**) refers to a set of SYNTACTIC and SEMANTIC CONTRASTS signalled by alternative PARADIGMS of the verb, e.g. INDICATIVE (the UNMARKED form), SUBJUNCTIVE, IMPERATIVE. Semantically, a wide range of meanings is involved, especially attitudes on the part of the speaker towards the factual content of the utterance, e.g. uncertainty, definiteness, vagueness, possibility. Syntactically, these contrasts may be signalled by alternative INFLECTIONAL forms of a verb, or by using AUXILIARIES. English mainly uses **modal auxiliaries**, e.g. *may, can, shall, must*, but makes a little use of inflection (e.g. *If I were you v. I was . . .*). The semantic analysis of **modal verbs**, and the study of their distribution in everyday speech, is a topic which has attracted a great deal of attention in LINGUISTICS, and several classifications involving such notions as necessity, possibility, certainty, etc., have been proposed. The results of such studies have implications for fields other than linguistics; for example, theoretical modal distinctions involving such notions have been a major concern of logicians. See also ALETHIC, DEONTIC, EPISTEMIC.

mora (*n.*) A term used in traditional studies of METRICS to refer to a minimal unit of metrical time or weight, and now used in some models of NON-LINEAR PHONOLOGY (e.g. METRICAL and PROSODIC phonology) as a separate level of phonological representation. The analysis of SEGMENTS into moras is usually applied only to the syllabic NUCLEUS and CODA (the RHYME), and not to the ONSET (‘onset/rhyme asymmetry’). **Moraic** structure accounts for many of the phenomena described in other models by such notions as the SKELETAL TIER. In the prosodic HIERARCHY, the moraic level is symbolized by μ (‘mu’). The notion of **mora counting** is used to handle languages where there is an opposition between heavy (two-mora, or **bimoraic**) syllables and light (one-mora, or **monomoraic**) syllables, and the equivalence between various types of heavy syllable. In Latin,

for example, a long vowel was equivalent to two short vowels or to a short vowel plus consonant.

moribund (*adj.*) see ENDANGERED LANGUAGE

morph (*n.*) see MORPHEME

morpheme (*n.*) The minimal DISTINCTIVE UNIT of GRAMMAR, and the central concern of MORPHOLOGY. Its original motivation was as an alternative to the notion of the WORD, which had proved to be difficult to work with in comparing LANGUAGES. Words, moreover, could be quite complex in STRUCTURE, and there was a need for a single concept to interrelate such notions as ROOT, PREFIX, COMPOUND, etc. The morpheme, accordingly, was seen primarily as the smallest functioning unit in the composition of words.

Morphemes are commonly classified into **free forms** (morphemes which can occur as separate words) and **bound forms** (morphemes which cannot so occur – mainly AFFIXES): thus *unselfish* consists of the three morphemes *un*, *self* and *ish*, of which *self* is a free form, *un-* and *-ish* bound forms. A word consisting of a single (free) morpheme is a **monomorphemic** word; its opposite is **polymorphemic**. A further distinction may be made between **lexical** and **grammatical morphemes**; the former are morphemes used for the construction of new words in a language, such as in COMPOUND words (e.g. *blackbird*), and affixes such as *-ship*, *-ize*; the latter are morphemes used to express grammatical relationships between a word and its CONTEXT, such as plurality or past TENSE (i.e. the INFLECTIONS on words). Grammatical morphemes which are separate words are called (*inter alia*) FUNCTION WORDS.

As with all EMIC notions, morphemes are abstract units, which are realized in speech by DISCRETE units, known as **morphs**. The relationship is generally referred to as one of EXPONENCE, or REALIZATION. Most morphemes are realized by single morphs, as in the example above. Some morphemes, however, are realized by more than one morph according to their position in a word or sentence, such alternative morphs being called **allomorphs** (see ALLO-) or **morphemic alternants/variants**. Thus the morpheme of plurality represented orthographically by the *-s* in e.g. *cots*, *digs* and *forces* has the allomorphs represented phonetically by {-s}, {-z} and {-iz} respectively (morphemes are usually symbolized using brace brackets). In this instance the allomorphs result from the phonetic influence of the sounds with which the singular forms of the words terminate, the process being referred to as one of ‘phonological conditioning’. The phenomenon of alternative morphemic realization is called **allomorphy**.

The study of the arrangement of morphemes in linear sequence, taking such factors into account, is **morphotactics**. The application of morphemic ideas to the analysis of languages was particularly extensive in the 1940s and 1950s in post-BLOOMFIELDIAN linguistics, when the approach came to be called **morphemics**, and several analytical difficulties emerged. The English plural morpheme illustrates some of these. When the plurality is simply added to the root, as in the above examples, the correspondence between morpheme and morph is straightforward. But in cases like *mouse* ~ *mice* and *sheep* ~ *sheep* it is more problematic. Several solutions have been proposed to handle such cases: in the case of *sheep*, for example, a **zero morph** of plurality may be recognized, to preserve the notion

of 'sheep+plural', this being symbolized as \emptyset . Other concepts which have proved to be of importance in 'morphemic analysis' include (1) the **empty morph**, set up to handle cases where a FORMAL feature in a word cannot be allocated to any morpheme, and (2) the **portmanteau morph**, set up to handle cases where a formal feature can be allocated to more than one morpheme. A **submorpheme** is a term sometimes used to refer to a part of a morpheme that has recurrent form and meaning, such as the *sl-* beginning of *slimy*, *slug*, etc.

morpheme-based morphology see MORPHOLOGY

morpheme-structure rules/conditions Terms used in GENERATIVE PHONOLOGY to refer to the processes which have attempted to cope with REDUNDANCY in carrying out an analysis. When SEGMENTS CO-OCCUR, the presence of a FEATURE characterizing one segment may make it unnecessary to specify a certain feature in another segment: the CONSTRAINTS involved are handled by MORPHEME-structure (or 'LEXICAL-redundancy') rules. For example, given an English morpheme which has an AFFRICATE in INITIAL position, it is predictable that the following segment will be a VOWEL. It would then be possible to leave the features for vowels (e.g. [-consonantal], [+sonorant]) blank in the UNDERLYING FORM of the morpheme, the appropriate values being filled in automatically by the application of the relevant morpheme-structure rule at some subsequent point in the DERIVATION. Several problems with this view led to a subsequent proposal to handle these redundancies in terms of **morpheme-structure conditions**, which state more explicitly the processes constraining the correspondences between segments, without recourse to the blank-filling procedure.

morphemic alternant, morphemic variant, morphemics (*n.*) see MORPHEME

morphology (*n.*) The branch of GRAMMAR which studies the STRUCTURE or FORMS of WORDS, primarily through the use of the MORPHEME construct. It is traditionally distinguished from SYNTAX, which deals with the RULES governing the combination of words in SENTENCES. It is generally divided into two fields: the study of INFLECTIONS (**inflectional morphology**) and of WORD-FORMATION (**lexical or derivational morphology**) – a distinction which is sometimes accorded theoretical status (**split morphology**). When emphasis is on the technique of analysing words into morphemes, particularly as practised by American STRUCTURALIST linguists in the 1940s and 1950s, the term **morphemics** is used. **Morphemic analysis** in this sense is part of a SYNCHRONIC linguistic study; **morphological analysis** is the more general term, being applied to DIACHRONIC studies as well.

Morphological analysis may take various forms. One approach is to make a DISTRIBUTIONAL study of the morphemes and morphemic variants occurring in words (the analysis of **morphotactic arrangements**), as in ITEM-AND-ARRANGEMENT-MODELS of description. Another approach sets up **morphological processes or operations**, which see the relationships between word forms as one of replacement (e.g. replace the /eɪ/ of *take* with the /ʊ/ of *took*), as in ITEM-AND-PROCESS models.

In early GENERATIVE linguistics, morphology and syntax are not seen as two separate LEVELS; the syntactic RULES of grammar apply to the structure of words, as they do to PHRASES and sentences, and morphological notions emerge only at

the point where the output of the syntactic component has to be given a PHONOLOGICAL REPRESENTATION (via the MORPHOPHONOLOGICAL rules). **Natural morphology** (NM) is an approach which aims to describe and explain UNIVERSAL tendencies in word-formation (such as the preference to derive NOUNS from VERBS, rather than the reverse). **Prosodic morphology** is a theory of how morphological and phonological determinants of linguistic form interact. In **affixal** (as opposed to **non-affixal**) **morphology**, the only permissible morphological operation is the combining of affixes and stems. Morphologically driven processes have become increasingly recognized within generative linguistics in recent years; for example, morphological features play a central role in the MINIMALIST PROGRAMME. Examples such as *refer* and *deceive* have also fuelled a debate between **morpheme-based** and **word-based** views of morphology: because *-fer* and *-ceive* are not independent morphemes, it is unclear how such words can best be handled, whether through the use of regular affixing processes (as in morpheme-based approaches) or not.

morphonology, morphophonology (*n.*) see MORPHOPHONEMICS

morphophoneme (*n.*) The basic unit recognized in a MORPHOPHONEMIC LEVEL of analysis. It is usually symbolized by the use of a capital letter within brace BRACKETS, e.g. {F}, {T}. One of the original examples used in order to justify establishing this entity was the ALTERNATION between /f/ and /v/ in some English plurals, such as *knife* ~ *knives*. There is no predictable alternation between /f/ and /v/ for English WORDS in general, but only in this specific GRAMMATICAL CONTEXT. This fact, it is argued, can be captured by setting up a morphophoneme {F}, as in {naiF}: in a singular context this is realized as /f/, in a plural context as /v/. Each morphophonemic symbol thus represents the class of PHONEMES which occurs within a particular set of grammatical ENVIRONMENTS. In later linguistic theory, the term SYSTEMATIC PHONEME is more widespread.

morphophonemics (*n.*) A branch of LINGUISTICS referring to the analysis and classification of the PHONOLOGICAL factors which affect the appearance of MORPHEMES, or, correspondingly, the GRAMMATICAL factors which affect the appearance of PHONEMES. In the European tradition, **morphophonology** (or **morphonology**) is the preferred term; in the American tradition, it is **morphophonemics**. In some theories, morphophonemics is seen as a separate level of linguistic structure intermediate between grammar and phonology (see MORPHOPHONEME). In early versions of GENERATIVE grammar, **morphophonemic rules** were distinguished as a separate COMPONENT in the DERIVATION of SENTENCES, whereby a TERMINAL STRING of morphemes would be converted into their correct phonological form. In later generative theory, the term SYSTEMATIC PHONEMICS became standard.

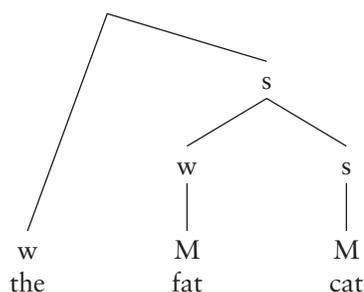
morphophonology (*n.*) see MORPHOPHONEMICS

morphosyntactic (*adj.*) A term used in LINGUISTICS to refer to GRAMMATICAL categories or properties for whose definition criteria of MORPHOLOGY and SYNTAX both apply, as in describing the characteristics of WORDS. The distinctions under

the heading of NUMBER in NOUNS, for example, constitute a morphosyntactic category: on the one hand, number CONTRASTS affect syntax (e.g. singular subject requiring a singular verb); on the other hand, they require morphological definition (e.g. add -s for plural). Traditional properties such as singular, PERFECT, INDICATIVE, PASSIVE, ACCUSATIVE, third PERSON are examples of **morphosyntax**.

morphotactics (*n.*) see MORPHEME, TAXIS

mot (*n.*) /məʊ/ (M) (as in French, *mot* 'word') A term sometimes used in METRICAL PHONOLOGY for a PROSODIC level assigned to LEXICAL category WORDS. For example, there would be two mots (prosodic words) in the phrase *the fat cat*:



mother (*n.*) A term used in GENERATIVE GRAMMAR to refer to a relation between NODES in a PHRASE-MARKER. If one node X IMMEDIATELY DOMINATES another node Y, then X is the mother of Y, and Y is the DAUGHTER of X.

motherese (*n.*) A term commonly used in the study of child LANGUAGE ACQUISITION for the distinctive way in which mothers talk to their young children. Its features include simplified GRAMMAR, exaggerated INTONATION patterns, DIMINUTIVE forms of words (e.g. *doggie*), a repetitive style and a tendency to expand the child's reduced utterances. A correlative notion of **fatherese** has also been proposed; but both notions are often now subsumed under the broader concept of **caretaker speech** (also known as CAREGIVER SPEECH), which includes grandparents, nannies and other carers, as well as parents. The term BABY-TALK, formerly widely used for this phenomenon, is not now usual in PSYCHOLINGUISTICS.

mother-in-law languages see AVOIDANCE LANGUAGES

motor theory (1) A term used in PHONETICS and PSYCHOLINGUISTICS to refer to a theory of SPEECH PERCEPTION which proposes that the brain of the listener constructs a MODEL of the ARTICULATORY ('motor') movements being produced by the speaker. It is not usually interpreted as someone having to 'talk in parallel' (i.e. subvocally) while listening – a view for which there is little support – but, rather, as an abstract mechanism, or model, which can help explain the indirect correspondences between the features of the ACOUSTIC signal and the SEGMENTS the listener actually perceives.

(2) See SYLLABLE.

move alpha (move α) A term used in GOVERNMENT-BINDING THEORY to refer to a single, UNIVERSAL MOVEMENT RULE, which subsumes all specific movement rules; also called **alpha movement**. The rule permits the movement of any PHRASAL or LEXICAL CATEGORY from one part of a SENTENCE to another in such a way that the operation involves SUBSTITUTION or (Chomsky-)ADJUNCTION. The application of the TRANSFORMATION is restricted by the SUBJACENCY principle of BOUNDING (sub-)theory, and its output is subject to a variety of FILTERS, PRINCIPLES, etc. stated by other (sub-)theories of GB. See also AFFECT ALPHA.

movement (*n.*) (1) A term often used within the framework of TRANSFORMATIONAL GRAMMAR to refer to a basic kind of transformational operation. **Movement transformations** have the effect of moving CONSTITUENTS (usually one at a time) from one part of a PHRASE-MARKER to another (the 'landing site'), as in the formation of PASSIVE sentences. An alternative term is REORDERING or PERMUTATION. In some approaches this notion is broken down into the more basic operations of ADJUNCTION and DELETION. Two main types of **movement rules** have been used: *WH*-movement and NP-movement (as when such PASSIVE sentences as *The cup was put on the table* are said to DERIVE from – *was put the cup on the table* by NP-movement of *the cup*). Other such RULES have been proposed from time to time, such as DATIVE movement (to handle such alterations as *X gave Y to Z* and *X gave Z Y*) and *though* movement (to handle such sentences as *good writer though she is . . .*); but the need for these has been disputed. The possibility that all movement rules may be reflexes of a single, universal rule (referred to as MOVE ALPHA) has also now been proposed. In later formulations, the category which has been **moved** leaves behind an EMPTY NODE, or TRACE: this approach is known as the 'trace theory of movement rules'. A moved constituent and its CO-INDEXED trace form a **movement chain**. In the MINIMALIST PROGRAMME, **move** is an operation which moves elements about in the process of TREE construction. Movement is constrained in various ways. Only the shortest movements of an element are acceptable (SHORTEST MOVE) into the nearest relevant position (the **minimal link condition**). Movements should be delayed until absolutely necessary (PROCRASTINATE). And movements must satisfy the requirements of the moved element (GREED).

(2) See HOLD.

mu (μ) see MORA

multidimensional scaling A statistical technique which has been applied in PSYCHOLINGUISTICS to quantify the MEANINGS of related LEXICAL ITEMS and define the SEMANTIC space within which these items work. INFORMANTS rate numerically a set of items (e.g. kinship terms, colours) in terms of their mutual similarity; the more similar the average ratings are, the closer these items are placed in the hypothetical space. In this inductive manner, it is hoped to establish classificatory criteria for lexical sets which might otherwise not emerge, and to develop more illuminating models of semantic STRUCTURE than are available using conventional analytic techniques. The technique is also used in PHONETICS, along with other statistical methods.

multilateral (*adj.*) A type of OPPOSITION recognized in PRAGUE SCHOOL PHONOLOGY, distinguished from BILATERAL. The opposition between English /t/ and /v/ is multilateral, because there are several possibilities of CONTRAST involving the same set of FEATURES, e.g. /d/ *v.* /f/. The opposition between /t/ and /d/, however, is bilateral, because these are the only units in the system which are ALVEOLAR/PLOSIVE, and they are differentiated by the single feature of VOICING.

multilingual (*adj./n.*) A term used in SOCIOLINGUISTICS to refer (as an adjective) to a SPEECH COMMUNITY which makes use of two or more LANGUAGES, and then (as an adjective or noun) to the individual speakers who have this ability; it contrasts with **monolingual**. **Multilingualism** (or **plurilingualism**) in this sense may subsume bilingualism (see BILINGUAL), but it is often contrasted with it (i.e. a community or individual in command of *more* than two languages). A further distinction is sometimes made between a multilingualism which is internal to a speech community (i.e. for routine domestic communicative purposes), and one which is external to it (i.e. an additional language being used to facilitate communication with other nations, as in the use of a LINGUA FRANCA). Sociolinguistic studies have emphasized both the frequency and complexity of the phenomenon: on the one hand, there are very few speech communities which are totally monolingual (because of the existence of linguistic minority groups within their boundaries); on the other hand, the multilingual abilities demonstrated are of several levels of proficiency, and raise different kinds of political, educational and social problems, depending on the numbers, social standing and national feeling of the groups concerned.

multilinked (*adj.*) see LINKING (2)

multiplex network see NETWORK

multiply ambiguous see AMBIGUITY

multisyllabic (*adj.*) see POLYSYLLABLE

multi-valued feature see BINARY FEATURE

murmur (*n.*) see BREATHY

mutate (*v.*) see MUTATION

mutation (*n.*) A term used in LINGUISTICS, especially in HISTORICAL LINGUISTICS, to refer to the change in a sound's QUALITY owing to the influence of sounds in adjacent MORPHEMES or WORDS. For example, in the period when Old English was developing, the influence of an /i/ VOWEL in certain circumstances caused other vowels to **mutate** in the direction of the CLOSE VOWEL, e.g. **foti* became *feet*. The term is also occasionally used in SYNCHRONIC CONTEXTS, as in the mutation of various INITIAL CONSONANTS in Welsh after certain words, e.g. *pen* 'head' → *fy mhen* 'my head'.

mutual intelligibility A criterion used in LINGUISTICS, referring to the ability of people to understand each other. If two VARIETIES of speech are mutually intelligible, they are strictly DIALECTS of the same LANGUAGE; if they are mutually unintelligible, they are different languages. The criterion seems simple, but there are many problem cases. Two varieties may be partially intelligible – for example, because they share some vocabulary. Also, political or cultural factors may intervene, causing two mutually intelligible varieties to be treated as different languages (e.g. Swedish and Danish) or two mutually unintelligible varieties to be treated as the same language (e.g. the so-called ‘dialects’ of Chinese).