

Research in the supporting sciences

LINGUISTIC THEORY

83–200 Berwick, Robert C. (Massachusetts Inst. of Tech.) and **Weinberg, Amy S.** Parsing efficiency, computational complexity, and the evaluation of grammatical theories. *Linguistic Inquiry* (Cambridge, Mass), **13**, 2 (1982), 165–91.

It has been proposed that the class of grammars that the language learner or linguist must recognise as possible grammars of natural languages can be reduced in size if it is limited to those that can be efficiently parsed. Gazdar and others have claimed that the set of context-free languages includes the class of natural languages, and also that context-free languages are more efficiently parsable than context-sensitive languages; as a result, they argue, only a grammar generating context-free language can serve as a model for natural language processing. Berwick and Weinberg argue, however, that the class of natural languages cuts across the context-sensitive and context-free language classes in some as yet undetermined way, and that a distinction must be drawn between relevant cognitive complexity and the mathematical complexity of a language, the former being the object of interest to linguists and psychologists. A measure of cognitive complexity must incorporate many factors normally disregarded by theories of mathematical complexity. Almost any language is efficiently parsable, and therefore attention to this criterion alone can do little to constrain the class of possible grammars.

83–201 Bollobás, Enikő. Who's afraid of irony? An analysis of uncooperative behaviour in Edward Albee's 'Who's afraid of Virginia Woolf?' *Journal of Pragmatics* (Amsterdam), **5**, 4 (1981), 323–34.

Irony, a verbal expression of 'uncooperative behaviour', is by its nature at home in modern drama, especially the theatre of the absurd: it absurdly violates the Gricean co-operative principle, and the maxim of quality in particular. In Edward Albee's 'Who's Afraid of Virginia Woolf?', irony becomes an intricate language game. The dissonance between intended communicative content and apprehended content basic to irony develops into at least three different mechanisms: (i) the simple negation of literal meaning gives the intended meaning; (ii) by violating the sincerity condition of the illocutionary act, the illocutionary force of the ironic speech act is reversed; (iii) the meaning conveyed by irony is presupposition (and also downgraded predication, entailment and expectation) logically implying its own negation. In Albee's masterpiece, irony serves the game of exorcism.

83–202 Bondarko, A. V. Основы построения функциональной грамматики (на материале русского языка). [Foundations of a functional grammar (on Russian material).] *Серия литературы и языка (Moscow)*, **40**, 6 (1981), 483–95.

The term ‘functional grammar’ is defined in terms of three steps, the second two of which are characteristic: a form is analysed as having meaning; this meaning is shown to be expressed by a variety of forms; the semantic invariant common to these forms is isolated. The characteristic property of this approach is seen as involving the search for different contexts of use for forms which express the same meaning.

An extensive (though obviously incomplete) list of semantic ‘fields’ which are appropriate to this approach is presented, including such categories as aspectuality and temporality, locativity, possession, causality, etc. However, not just any semantic feature is appropriate here – the various forms which express these meanings need to interrelate; in this perspective, such semantic categories as the existential appear dubious candidates for functional treatment.

83–203 Chomsky, Noam (Massachusetts Inst. of Tech.). On the representation of form and function. *Linguistic Review* (Dordrecht), **1** (1981/2), 3–40.

Chomsky outlines a linguistic theory in which the object of study is grammar rather than language as such, the latter being regarded as an epiphenomenon. Under the constraints of universal grammar, the grammar of a language must contain rules determining not only the surface structure of sentences and the assignment of thematic roles to the lexical elements in them, but also the relation between these two types of representation. The thematic structure associated with lexical elements (e.g. *persuade* takes two complements: an NP and a clause) determines the D-structure of the sentences in which the elements appear. Maximally simple transformational rules, constrained by principles of binding and control, map D-structures into S-structures, but the operation of these constraints results in S-structures so enriched that LF (‘logical form’) can be determined at that level only. The simple rule ‘Move α ’, where α is any category, can, in conjunction with such constraints, subsume the old rules of extraposition, WH-movement, raising, and passive. Such an account applies to languages such as English in which grammatical function is configurationally defined; in non-configurational languages, such as Japanese, grammatical functions are assigned randomly to D- and S-structure in accordance with lexical thematic structures and principles of case-assignment.

83–204 Coulmas, Florian (Tokyo). Idiomatizität: Zur Universalität des Idiosyncratischen. [Idiomatizität: on the universality of the idiosyncratic.] *Linguistische Berichte* (Wiesbaden), **72** (1981), 27–50.

According to Frege’s principle of compositionality of linguistic meaning, semantic and syntactic structures are parallel, such that meaningful items are either unanalysable wholes or are built up synthetically from other such wholes. But idioms seem to violate this principle since they have a structure yet have unitary meaning. Though the historical tendency for complex items to lose their internal semantic structure (e.g.

husband) appears to support the principle, many idioms still retain an internal semantic structure (e.g. *red tape*). Idiom formation can be explained through the arbitrary relation between form and meaning, and the difficulty of meeting the need for new arbitrary forms for new meanings. Idioms provide an economical and motivated way of meeting this need, the arbitrariness being a secondary development, largely through metaphor and metonymy. Examples from Japanese, Chinese, Yoruba, English and German show that the resulting loss of semantic and syntactic structure do not run parallel. The process itself can be seen as a diachronic universal of language.

83–205 Gross, Maurice (U. of Paris VII). *Les bases empiriques de la notion de prédicat sémantique*. [The empirical basis of the notion of semantic predicates.] *Langages* (Paris), **63** (1981), 7–52.

This long and fully exemplified paper describes and classifies, for French, the relationships between verbs and their arguments. Recognised problems such as types of adjuncts, e.g. *Max va à Gap* v. *Max marche à Gap*, and causative operators, e.g. *Max fait dormir Luc*, are discussed.

Gross argues, from the existence of a great variety of complex relationships between verbs and their arguments, that a linear, lexical-insertion type, generative grammar model is inadequate, and in particular that the role of lexical relationships has been underestimated in such models. Appendices give tables of types of arguments which particular verbs in French can take.

83–206 Helgorsky, Françoise (U. of Paris III). *La notion de norme en linguistique*. [The concept of norm in linguistics.] *Français Moderne* (Paris), **50**, 1 (1982), 1–14.

This is the introduction to a special issue of *Français Moderne* devoted to this subject, and it discusses, from a theoretical perspective, the use of the term ‘norm’, which is said to be ‘one of the most ambiguous and most polysemic terms in the science of language’.

Three uses, or orientations of use, are distinguished: (1) an objectively defined norm arrived at by observation, exemplified by, in phonetics, local ‘accents’ which maintain the basic phonological oppositions of the standard language; in morphology, the plural form *-als* v. *-aux* for nouns in *-al*, and in syntax, the requirement of certain nouns for particular prepositions, e.g. *croire en Dieu* v. *croire au diable*; (2) a prescriptive norm derived from what is thought to be correct in a given speech community; and (3) (considered less relevant) a norm established theoretically, for purposes of comparison, for example in stylistics.

After mentioning the various contributions to the special issue, the author concludes that the whole social nature of language is encapsulated in the idea of a norm and that linguists cannot therefore avoid confronting it.

83–207 Hesse, Harald and Küstner, Andreas (Academy of Sciences, GDR). Towards syntactic analysis of co-ordinative sentences. *SMIL: Journal of Linguistic Calculus* (Stockholm), **4** (1980), 5–33.

The 'co-ordination graph', in which one node may depend on two other nodes and which has double edges and nodes, is developed as an additional generalisation to Kunze's (1975) Dependency Grammar, in order to represent the structure of co-ordinative sentences such as *The man reads and works in the garden*.

An algorithm is then outlined for the automatic analysis of co-ordinative sentences. Word forms are represented by features (syntax and valence), which are subordinated to each other in 'bundles'. An 'analysis algorithm' looks for the bundles to produce a co-ordination graph, whereby all different meanings of the sentence are investigated simultaneously. Finally, a 'completing algorithm' calculates the multiple edges and nodes of the graph.

83–208 Schnelle, Helmut. Elements of theoretical net-linguistics. Part 1: Syntactical and morphological nets – neuro-linguistic interpretations. *Theoretical Linguistics* (Berlin, FRG), **8**, 1/3 (1981), 67–100.

This first part gives an introduction to a general method for the translation of grammars into formal nerve nets by illustrating it for simple cases. It turns out that the basic elements of grammatical analysis, viz. grammatical paradigms or componential analyses, alternatives, and constituent combinations, seem to be closely correlated with a basic element described recently in neurophysiology, viz. the cortical column arrangement. Independent of this empirical interpretation the procedural nets assigned to grammars exemplify fruitful methods of procedural analysis for linguistics.

83–209 Verschueren, Jef (U. of Antwerp). Problems of lexical semantics. *Lingua* (Amsterdam) **53**, 4 (1981), 317–51.

Some of the central problems of (comparative) lexical semantics are dealt with: (i) How does one decide which word groups – if any – should be treated as lexical items and which ones should not? (ii) What are the limitations of componential analysis and semantic field theory as methods to describe the internal semantic structure of lexical items and their external semantic relationships, respectively, and how can they be transcended? (In this context the notions of prototype, basic level term, scene and frame are introduced.) (iii) How can one avoid the danger of circularity in semantic analysis? (iv) How can analyses be represented? These issues of general interest are addressed with special reference to the domain of linguistic action verbials (verbs and verb-like expressions used to describe linguistic action).

83–210 Wunderlich, Dieter. Sprache und Raum. [Language and space.] *Studium Linguistik* (Kronberg T/s, FRG), **12** (1982), 1–19.

Space is more fundamental than time to the organisation of language. Some important properties of space are discussed, e.g. space is three-dimensional, deictic, vertical, structured in connected networks. The basic concepts of topology, in particular the

notions of 'neighbourhood' and 'path', are then presented, and form the basis of a semantic analysis of locative prepositions in German. For example:

innerhalb: $x \subset R$ at t (inner region)
außerhalb: $x \subset \bar{R}$ at t (outer region)

Prepositions are taken to be functors: when applied to an object a they provide the neighbourhood of a . Prepositions of inner space/outer space/environment, of direction, or verticality/horizontality, and others, are analysed in this way. The deictic (relative to ego) and intrinsic (relative to object) uses of prepositions of horizontal perspective, viz. *vor*, *hinter*, *rechts*, *links*, are also considered.

83-211 Ziv, Yael (Hebrew U. of Jerusalem) and **Sheintuch, Gloria** (Haifa U.). Passives of obliques over direct objects. *Lingua* (Amsterdam), **54**, 1 (1981), 1-19.

Passives of oblique objects were claimed to be ungrammatical in sentences containing direct objects. No explanation was provided for this structural restriction. In this paper an explanation is attempted in terms of a clash over the role of affected entity between the subject of the passive sentence and its direct object. This semantically-pragmatically based constraint has, apparently, become a fully grammaticised restriction for many speakers, but not for all. Instances where passives of obliques in sentences containing direct objects are marginally acceptable are discussed. It is claimed that the conflict between the two arguments of the predicate over the role of affected entity, which is responsible for the ill-formedness of such constructions in general, does not arise in these cases, since the direct object is perceived as an integral part of the verbal unit and not as an argument of the predicate. In this connection the non-discreteness of the argument-role of direct objects is considered and it is suggested that the identification of a given direct object as an argument depends on factors ranging from its degree of referentiality to the kind of verb with which it co-occurs in a particular context.

LINGUISTIC DESCRIPTION AND ANALYSIS

83-212 Birenbaum, Ya. G. К теории сложного предложения (на материале английского языка. [Towards a theory of the complex sentence (on English material).] *Вопросы языкознания* (Moscow), **2** (1982), 50-8.

The notion of the complex sentence is approached from the notion of a 'base' – involving the elements of a simple sentence without their grammatical formation. Possible simple sentences are defined as being of rank 0 (the canonical simple sentence involving a nominative subject and finite verb phrase), and types of subordinate clause are defined in terms of seven ranks, progressively departing from the canonical form of simple sentences. A basic feature of English, as opposed to French or Russian, is said to be the existence of many types of reduced subordinate clause. There is an extensive discussion of the difference between complex sentences and conjoined

sentences, the boundaries of which are somewhat fuzzy, and of the question of whether there is in fact a distinct type of conjoined sentence.

83–213 Wales, M. L. (Monash U.). Parataxis: a penthouse next door? *Glossa* (British Columbia), 15, 1 (1981), 53–82.

The claim is made that grammars should specify the structure and semantics of paratactically associated sentences in addition to those of co-ordinated and subordinated types. Paratactic structures are common in natural languages, and, having their own distinct functions and meanings, are not just stylistic variants of more complex syntactic structures. Parenthetical and antithetical sentence types are discussed in detail, with examples from English, Latin, and non-Indo-European languages of Papua New Guinea and Australia. Topics range from the status of main clauses in processing, to the modal functions of parataxis, and the widespread use of inexplicit structures in spoken language. Evidence from Latin suggests that recent arguments against the diachronic development of syntactic structures from paratactic associations should be reconsidered. The *a priori* assumptions of such arguments are nullified by the claim made here that parataxis is itself a recursive device.

PHONETICS AND PHONOLOGY

83–214 Anderson, Stephen R. (UCLA). Why phonology isn't 'natural'. *Linguistic Inquiry* (Cambridge, Mass), 12, 4 (1981), 493–539.

In discussing the general question of 'naturalness' in linguistics – whether or not linguistics is in its entirety reducible to phenomena that can and ought to be observed and explained from outside the system itself – the author focuses on three issues in phonology: (1) should a descriptive framework for phonological analysis (primarily a universal system of distinctive features) be limited to a set associated directly with measurable acoustic, articulatory and/or auditory properties? (2) should the set of rules admitted in the grammars of particular languages be limited to formal statements of surface regularities that have a demonstrable phonetic basis? and (3) should the relationship between underlying and surface representations of linguistic elements be limited to ones which can be directly induced from the corpus of forms and alternations available to the child, and which are thus 'learnable' in some general sense? Such a 'natural' approach limits the scope of inquiry in phonology in arbitrary and undesirable ways. Specific examples relating to the nature of distinctive features, the phonetic content of phonological rules and the relation between underlying and surface forms are given to add weight to this view and to support the conclusion that the relationship between language and other domains is at best an indirect one and that an adequate account of the phonological systems of natural languages must accord a central role to a set of principles that have no direct foundation in extralinguistic considerations. Questions (1)–(3) are thus answered in the negative and are each qualified as follows: (1*a*) indirect or inferential evidence should be permissible; (2*a*) grammars should contain non-natural rules as a central part if needed and

(3a) phonological theory should admit of more abstract representations justified inferentially or otherwise.

83–215 Cairns, Charles E. (Queen's Coll., NY) and **Feinstein, Mark H.** (Hampshire Coll., Amhurst, Mass). Markedness and the theory of syllable structure. *Linguistic Inquiry* (Cambridge, Mass), **13**, 2 (1982), 193–225.

A theory of syllable structure which is founded on the general theory of markedness is proposed. Syllable structure is defined using the formalism of phrase-structure rules, with the addition of marking conventions that assign markedness values to syllables by virtue of their structure and the markedness of the segments comprising them. Such rules and conventions need to refer to the constituents they establish; in particular, evidence is presented for a richer hierarchical structure for the onset constituent than that assumed in other theories. Finally, it is argued that syllabification is a lexical process that applies prior to affixation operations, but that certain reduplication phenomena support the view that syllabification is a cyclic process. The primary language of exemplification is Sinhalese.

83–216 Houdebine, Anne-Marie (U. of Angers). Norme, imaginaire linguistique et phonologie du français contemporain. [Norm, perceptual norm and contemporary French phonology.] *Français Moderne* (Paris), **50**, 1 (1982), 42–51.

A distinction is drawn between objective norms, which arise from systematic and statistical study of a language, and subjective (perceptual) norms, which are evaluative, fictive and prescriptive, and discovered by the study of speakers' attitudes to language in relation to their observed linguistic behaviour (these are termed '*imaginaire linguistique*').

The well documented phonological convergences and divergences of modern spoken French are referred to, for example the possibilities for the vowel system to have four, or three degrees of aperture (vowel height); presence or absence of a qualitative opposition for the medial vowels /e/-/ɛ/, /o/-/ɔ/ and /ø/-/œ/; or presence or absence of labiality for the two back nasals /ɑ̃/-/ɛ̃/. It is perhaps less well known that the various groups who use the 4-degree system also differ from each other in the way they use the oppositions – some neutralise the aperture distinction in particular positions, and others keep it. Both diachronic and synchronic analysis must in principle take account of variation, and more particularly, of both objective and perceptual norms, and the relationship between them.

83–217 Lodge, K. R. (U. of East Anglia). Dependency phonology and English consonants. *Lingua* (Amsterdam), **54**, 1 (1981), 19–39.

A discussion of consonantal assimilation in Stockport English is presented to support the view (proposed by Anderson and Jones in *Phonological structure and the history of English*, 1977) that phonological segments are subject to hierarchical dependencies as well as linear sequencing and that the segments themselves can be either simple or complex. Stops p, t, k, b, d, g, nasal n, palato-alveolar fricatives and affricates ʃ,

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ʒ, tʃ, dʒ and labio-dentals θ and ð are discussed (IPA symbols). Assimilation rules are proposed for t, d, n, θ, ð and i. Certain deletions (e.g. [uä?] *want*, [lafieə] *last year*) are explained using Anderson and Jones' notion of dependency degree.

83–218 Port, Robert F. (Indiana U.). On the structure of the phonetic space with special reference to speech timing. *Lingua* (Amsterdam), **55**, 2/3 (1981), 181–219.

It seems to be widely agreed that there must be some universal inventory of possible speech sounds and that these sound elements are inherently segmented despite evidence of many non-segmental phonetic structures. It is argued here, however, that if a language is viewed as fundamentally a communication device for a community and phonetics is viewed as the signalling space for the language, then certain general constraints for speech sounds follow. For example, speech sounds must be invariant between gesture and sound and across members of the community. By employing the notion of symmetry, it is possible to define the notion of phonetic space in a theoretically useful way without having to specify any particular elements in it.

Each language 'invents' its own fragment of the potential phonetic space for distinguishing morphological signals for use by the community. The superficial similarities between the phonetic inventories of unrelated languages which provided inspiration for claims of a universal set should be viewed as reflecting anatomical similarities of members of our species and the fact that economic considerations tend to lead to similar solutions to the practical problem of differentiating a large vocabulary.

SOCIOLINGUISTICS

83–219 Ajulo, E. B. (U. of Ife). 'Maze' function in speech: the example of two social groups in Sheffield City. *UEA Papers in Linguistics* (Norwich), **16/17** (1982), 82–98.

Spoken language often contains incomplete utterances, false starts, repetitions, corrections, all classified as 'maze behaviour'. Rather than linking maze exhibition to the intelligence and social class of a speaker (as Bernstein does), it is more useful to link mazes to the lexical and/or grammatical selections of a speaker's utterances.

Six maze types were observed in a study of the speech of two social groups in Sheffield: (1) fragment (incomplete structure), (2) nonsensical structure, (3) repetition immediate, (4) repetition non-immediate, (5) substitution immediate, and (6) substitution non-immediate [diagram shows the network of substitution strategies]. Members of the two social groups naturally exhibited the behaviours with more or less equal degrees of frequency, suggesting that mazes are necessary factors of redundancy in all use of language. It seems likely that speakers, whatever their social, economic or educational status, will have more difficulty when making choices from the lexical level than they will when making choices from the grammatical level, and so there will be a stronger association of maze behaviours of the types discussed here with lexical choices than with grammatical choices.

83–220 Fishman, Joshua A. and others (Ferkau Graduate Sch., Yeshiva U.). *Maintien des langues, 'renouveau ethnique' et diglossie aux Etats-Unis.* [Language maintenance, ethnic revival and diglossia in the United States.] *Linguistique* (Paris), 18, 1 (1982), 45–64.

In 1970 nearly 35 million Americans declared their mother tongue to be other than English. And throughout the United States, radio stations and newspapers, schools and churches, all using languages other than English, afford impressive evidence of the country's linguistic diversity. However, except for recent immigrants, language used and declared mother tongue do not correlate closely.

The absence of continuity of language use between the immigrant generation and their children is striking; once the second generation has attained bilingualism, the factors working towards the preservation of a situation of stable diglossia – geographical concentration, marriage within the ethnic group, political and religious ideologies – are not strong enough in the majority of cases to prevent a decline in mother tongue use in favour of English. However, the third generation will often feel a renewed interest in, and affection for, the language of their grandparents.

More Americans declared a non-English mother tongue in 1970 than in 1960 or 1940 and the difference is not accounted for by increased immigration or population growth. While interaction with other ethnic groups favours the use of English, the trend of the '70s against centralism and uniformity favoured a renewed interest in ethnic identity.

83–221 Giles, Howard and Byrne, Jane L. (U. of Bristol). An intergroup approach to second language acquisition. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), 3, 1 (1982), 17–40.

A recent social psychological approach to language and ethnicity is discussed which attends to the issue: who in an ethnic group uses what language variety, when and why? More specifically, it allows us to understand the processes underlying group members' desires to attenuate and even create their own distinctive ethnolinguistic varieties. This framework is likely to advance our knowledge of factors influencing successful acquisition of a second language. Two current social psychological models, by Gardner and by Clément, of second language acquisition in inter-ethnic contexts are then compared and evaluated critically. Whilst these models exhibit significant theoretical advances in the area, they nonetheless possess certain deficiencies. Prime amongst these concerns is their failure to take into account explicitly processes (such as ethnic identification) which are accorded significance in current intergroup theory and formal status in the authors' approach to language and ethnicity, introduced at the outset of this paper. An attempt is made to integrate the latter with important aspects of Gardner's and Clément's models culminating in a set of propositions concerned with specifying the social psychological conditions which facilitate or inhibit members of a subordinate ethnic group achieving near native-like proficiency in the language of a dominant ethnic collectivity.

83–222 Loveday, Leo J. (Doshisha U., Japan). Communicative interference: a framework for contrastively analysing L2 communicative competence exemplified with the linguistic behaviour of Japanese performing in English. *JRAL* (Heidelberg), **20**, 1 (1982), 1–16.

The paper examines socioculturally related interference phenomena by focussing on the English verbal behaviour of the Japanese from a contrastive analysis approach. Four contrastive-based categories of interference as outlined by Schulte–Pelkum are considered: (1) underdifferentiation, e.g. where the Japanese L1 community attaches a low evaluation to talk, hence appearing to Westerners to be distant, cautious or vague; (2) overdifferentiation, e.g. where linguistic behaviour receives greater emphasis in the L2 community than in the L1 (the opposite of (1) above), such as the question of status establishment. Japanese have an overdifferentiated sense of social hierarchy which affects their way of employing address terms. There is also a strong emphasis on politeness, based on status/age inferiority *v.* superiority; (3) reinterpretation of features or act, such as silence, or interaction with strangers or foreigners; and (4) primary absence of L2 features, e.g. such non-verbal behaviour as hissing with breath intake to indicate deference or commiseration.

Although there is nothing negative about such phenomena in themselves, the social consequences are rarely favourable; negative stereotyping often follows, i.e. the English are ‘aggressive’, the Japanese ‘slippery’, and confusion and suspicion may arise. A contrastive analysis of communicative interference can provide the information about problem areas which needs to be incorporated into communication exercises such as dialogues, role-play and problem-solving exercises.

83–223 Tollefson, James W. (U. of Washington). Centralised and decentralised language planning. *Language Problems and Language Planning* (Berlin, FRG), **5**, 2 (1981), 175–88.

This article distinguishes centralised and decentralised language planning processes according to three criteria: degree of coupling; degree of plan adaptation; and relative importance of macro- and micro-implementation perspectives. Centralised language planning is characterised by a tightly coupled planning system, little plan adaptation, and dominance of the macro-implementation perspective. Decentralised language planning is characterised by a loosely coupled planning system, a high degree of plan adaptation, and dominance of the micro-implementation perspective. A brief summary of language planning in Yugoslavia and the Soviet Union illustrates these two processes. The notion of ‘metaplanning’ is discussed in relation to certain problems inherent in decentralised language planning. Finally, language planning is distinguished from a related process termed ‘operation of market mechanisms’.

PSYCHOLINGUISTICS

83-224 Baggett, Patricia and Ehrenfeucht, Andrzej (U. of Colorado). Information in content equivalent movie and text stories. *Discourse Processes* (Norwood, NJ), **5**, 1 (1982), 73-99.

New methods of data analysis are introduced to assess similarities and differences in responses of junior high and college students to the 'same' story presented as movie v. text. First, ways to determine to what degree a movie and text are the same in content are specified. Then, using a response task of ordering 23 photos or sentences from the story, an out-of-order score is introduced to quantify the amount of difference between the actual and recalled story order. The score is converted to bits of information, and a model of the response task, with four encoding and four problem solving parameters, is developed. Different amounts of information can be assigned to different parameters in the model. Children encode movie better than text, but adults encode them equally well. Adults are better problem solvers than children, but children have a transient text memory which helps them solve the problem of ordering sentences. An analysis using linguistic v. pictorial cohesion explains why people make the errors they do in ordering.

83-225 Bronckart, J. P. (U. of Geneva). Verbes et catégories verbales; vers une approche textuelle. [Verbs and verbal categories: towards a textual approach.] *Bulletin CILA* (Neuchâtel), **35** (1982), 7-20.

This paper describes the development of tense in children's language. From a corpus of 20,000 utterances in which children described an action they were shown (for example, a cat knocking over a bottle), three phases of development were distinguished: 3-6 years, 6-8 years, and 10-adulthood. Analysis at four levels, physical, cognitive, semantic and morpho-syntactic, is described.

It was found that for 3-6 year olds, verb tense expresses nuances of aspect, rather than temporal relations. These children used three criteria in formulating their utterances: the event, the result, and the difficulty of getting the result. For 6-8 year olds, 25 per cent still used only one tense in all their descriptions. But the criterion 'accomplished v. unaccomplished' was used when verb tense was varied. They also begin to express the difference between event-time and utterance-time.

The inadequacy of the four-level analysis is that it does not focus on the language as communication. An amended approach, based on a typology of different text functions in French, is suggested.

83-226 Goelman, Hillel (U. of Victoria, BC). Selective attention in language comprehension: children's processing of expository and narrative discourse. *Discourse Processes* (Norwood, NJ), **5**, 1 (1982), 53-72.

This study examined the hypothesis that the ability to attend to connected discourse in a selective manner is an integral component of literate competence. In investigating this aspect of language comprehension in children, the study considered the relative importance of discourse type (expository or narrative), modality (oral or written), and

reading level. An experimental group of 42 grade four children were given prequestions prior to reading/listening to subsequently presented texts, and comprehension scores were compared with those of a matched control group who had read/listened to the texts without the prequestions. The data revealed that children could attend to texts selectively when reading exposition, listening to exposition, and reading narrative, but not in listening to narrative. Good and average readers demonstrated selective reading and listening, while poor readers did not. These results are considered in the light of Olson's (1977) theory on the development of literacy and in the context of research on comprehension of expository and narrative texts.

83–227 Holmes, Janet (Victoria U., Wellington, NZ). Hello-Goodbye; an analysis of children's telephone conversations. *Semiotica* (The Hague), **37**, 1/2 (1981), 91–107.

Studies by Schegloff and Sacks of adults carrying out telephone conversations, together with adult telephone conversation data collected for this study, are used as a basis for this description of the proficiency of children in handling telephone interaction. Five different aspects are analysed: openings, caller's first turn, introducing the first topic, feedback, and closings.

The 'strangeness' of some young children's telephone behaviour can probably be attributed to a number of small but crucial features, such as failure to introduce the first topic at an appropriate point, to supply appropriate feedback, to recognise transition cues, and to complete preclosing adjacency pairs. Other features which may represent child norms are: the simpler and less formal first utterances used by children compared with adults; the tendency not to initiate new topics, ask questions, or volunteer comments in interaction with non-intimates; and the expectation that the person called should initiate the closing section. Nevertheless, the fact that these eight-year-olds had mastered many of the rules of telephone interaction should not be ignored.

83–228 Lavorel, Pierre M. (Inst. National des Sciences Appliquées, Lyon) and **Arbib, Michael A.** (U. of Massachusetts). Towards a theory of language performance. Neurolinguistics, perceptual-motor processes, and co-operative computation. *Theoretical Linguistics* (Berlin, FRG), **8**, 1/3 (1981), 3–28.

The study of process and representation should be intertwined in the analysis of language: the importance of studying the brain in the human, the human in society, all immersed in an intricate flow of information processing, is stressed. The important role of 'co-operative computation' – the dynamic interaction of simultaneously active brain regions – in the neurobiology of cognition in general and of language performance in particular is emphasised. A visuomotor metaphor for neurolinguistics is offered which shows how a lesion may damage a pattern of co-operative computation rather than remove a subsystem which produces the behaviour whose loss attends the lesion. This perspective is used to analyse Broca's aphasia as well as temporal and parietal aphasias. A concluding perspective is given on the subtle problems of playing out cognitive function over a 'system of systems' in the brain, to replace 'faculty models'

which mistakenly seek to locate distinct faculties of the mind in distinct regions of the brain.

83–229 Miller, Max and Klein, Wolfgang. Moral argumentations among children. A case-study. *Linguistische Berichte* (Wiesbaden), **74** (1981), 1–19.

‘Argumentations’ are a special type of complex verbal action, i.e. activities, which serve to solve a task by verbal means. They consist of utterances whose content may, but need not, enter the argument to be developed. Distinctions are made between individual and collective argumentations, unanimous and antagonistic stages of argumentations, private and public argumentations. The analysis of the social functions of argumentations belongs to the pragmatics of argumentation, whereas this paper is concerned with the principles according to which the argument is created, in other words, with the logic of argumentation.

The case-study is based on a collection of 12 argumentations by three groups of four children aged 5, 7–8 and 10, who were told four stories, each of which ended with a moral problem to which they were asked to give a joint answer. It was found that group 1 (5 year-olds) could handle certain basic techniques of argumentation, could distinguish between arguments depending on different parameters and could set these arguments against each other. They failed to construct a joint argument at the threshold of a co-ordination problem. Groups 2 (7–8 year-olds) and 3 (10 year-olds) could apply two different parameters simultaneously and develop a higher order parameter for evaluating evaluations.

83–230 Pellegrini, A. D. (U. of Georgia). The development of preschoolers’ private speech. *Journal of Pragmatics* (Amsterdam), **5**, 5 (1981), 445–58.

This study examined the extent to which three age groups of preschoolers regulated their actions with speech-to-self in a task context. Vygotsky stated that preschoolers’ behaviours are initially guided by adults’ utterances. With development, children themselves use adults’ utterances, in the form of private speech, or speech-to-self, to guide their actions. This internalisation is characterised by children generating less overt private speech as they develop. The first hypothesis of this study, that preschoolers’ ratio of private to total speech should also decline with age, is supported.

Vygotsky also hypothesised that children’s ability to use private speech to regulate their own actions also develops during the preschool period. Self-regulating private speech has been defined as utterances either accompanying or preceding actions and semantic self-regulating utterances. The second hypothesis of this study, that preschoolers’ self-regulating private speech increases with age, is not supported.

With development, Vygotsky stated, preschoolers’ private speech was said to become syntactically abbreviated as it served a self-regulating function. In this study, most utterances, despite use, were syntactically complex. However, a significant number of utterances were syntactically abbreviated.

83-231 Pellegrini, A. D. (U. of Georgia). The construction of cohesive text by preschoolers in two play contexts. *Discourse Processes* (Norwood, NJ), **5**, 1 (1982), 101-8.

The intent of this study was to determine the process by which preschoolers construct cohesive oral text (Halliday & Hasan, 1975) in two settings: dramatic and constructive play. Four preschoolers, two boys and two girls ranging in age from 51 to 60 months, were videotaped in their preschool classrooms for 30 minutes during free play. It was found that players in both contexts repeated introductory utterances to begin new play topics. Interlocutors in the dramatic play episodes often repeated the topic initiator's introduction and asked *Wh* and *Yes/No* questions as topic clarification strategies. Topic initiators, in turn, clarified their introductions. Such clarification strategies were not observed in constructive play. entire social dramatic play episodes were found to be mediated by topic introductory utterances; the play themes defined in the introductions were referred to anaphorically and cataphorically throughout the text.

A large number of exophoric references (21% of utterances) were observed in constructive play. Play in this context was less dependent on cohesive text for sustenance. Pedagogical implications are discussed.

83-232 Rau, Marie Luise. Die Entwicklung von Vergangenheitsstrukturen in der Sprache eines Driejährligen. [The development of past tense structures in the language of a three-year-old.] *Folia Linguistica* (The Hague), **13**, 3/4 (1979), 357-412.

Philipp's utterances from 2 years 10 months (2; 10) to 4 years 3 months were written down by his mother, a linguist, and 4,450 examples of past tense structures analysed. The functional side of lexical and grammatical development, e.g. recalling past experiences, is also documented, as are factors which influence the process of learning, e.g. Philipp's passion for story-telling and listening to stories greatly speeded up his acquisition of the preterite. Language acquisition is divided into 5 phases, from 2; 10 to 3; 7½, and an ensuing period from 3; 7½ to 4; 3. By 3; 7½ Philipp had acquired essentially all the past tense structures of German. In Phase 1 adverbials such as *früher mal* play a crucial role in expressing the past, the perfect is used with the meaning of the preterite, and the *-en* ending on past participles is preferred. In Phase 2 Philipp forms past participles with ablaut, e.g. *gewonnen*, and *-t* takes over from *-en* as the past participle ending. The period 3; 7½-4; 3 is one of clarification and expansion.

83-233 Tyler, Lorraine Komisarjevsky. Serial and interactive-parallel theories of sentence processing. *Theoretical Linguistics* (Berlin, FRG), **8**, 1/3 (1981), 29-65.

Psycholinguistic models of sentence processing have been founded, almost exclusively, upon various psychological interpretations of earlier versions of transformational generative grammars (*Syntactic structures*, 1957; *Aspects of the theory of syntax*, 1965). In this paper, the author describes some of the most prominent of these models, and shows how each was based upon particular interpretations of certain components of

the linguistic theory. It is then argued that no version of a processing model based upon these early versions of TGG provides a coherent account of sentence processing, and that, in fact, no such model is compatible with the available on-line processing data. A psycholinguistic model of language processing derived from psychological process data is presented which, it is argued, is the appropriate basis from which to develop a model of language processing.

From the first word of an utterance (which itself will normally occur in a more or less well-developed interpretative context), the listener attempts a full interpretation of the incoming material. He maps each word as he hears it onto as fully developed a representation as the ordering of processing information in the utterance permits. Following some proposals in the field of artificial intelligence for the organisation of complex processing systems (e.g. Winograd, 1974), we can think of this as a heterarchically organised set of processes. Different knowledge sources co-operate to produce a single higher-level representation, and no single source produces an analysis just in its own terms. Rather, all computation is conducted with reference to the interpretative goal of the system as a whole – in the present case, the understanding of the utterance being heard.

83-234 van Hekken, Suus M. J. and Roelofsen, Wim (Free U. of Amsterdam). More questions than answers: a study of question–answer sequences in a naturalistic setting. *Journal of Child Language* (Cambridge), **9**, 2 (1982), 445–60.

This study examines changes with age in interrogative sequences among Dutch-speaking children. Thirty-eight male and female pairs of children were videotaped in a play situation; eight pairs of pre-schoolers and ten pairs of 7-, 9- and 11-year-old schoolchildren, with an equal number of pairs of boys and pairs of girls at each age level. An interrogative sequence consists of: question–listener reaction–confirmation of that reaction. Questions were analysed according to function, content and form, and listener reaction according to how appropriate it was. The main results are: (1) changes with age occur in the use and form but not in the content of questions; (2) a relation exists between the function, content and form of a question and the listener's reaction; (3) listeners frequently do not answer questions (this tendency is stronger within the two younger age groups than within the two older ones); (4) answers are frequently not confirmed.

PRAGMATICS

83-235 Auchlin, Antoine (U. of Geneva). Réflexions sur les marqueurs de structuration de la conversation. [On conversational structure markers.] *Études de Linguistique Appliquée* (Paris), **44** (1981), 88–103.

A conversation is a dynamic process. Only two levels (exchange and intervention) of Roulet's model of hierarchical analysis of conversation are considered here. The operations that structure conversation are signalled by specific terms called 'markers' (MSC), for example *au fait, voilà, alors, maintenant, bon, eh bien*, etc. Their function

is to hold the conversation together, not to act as links in an argument. The role of the MSC figuring in an example of an actual conversation is described and analysed, and the different categories of MSC are classified and tabulated. [Tables; examples.]

83-236 Authier, Jacqueline (U. of Paris III). La mise en scène de la communication dans des discours de vulgarisation scientifique. [The formulation of the message in the discourse of popular science.] *Langue Française* (Paris), **53** (1982), 34-47.

Scientific explanation for the layman is in general an activity of reformulation of a source text (D1) into a second text (D2). This paper examines texts from three sources – *Science et Vie*, *Science et Avenir*, and the science pages of *Le Monde* – with the goal of characterising the functioning, and the function, of their formulation.

A noticeable characteristic of D2 texts is their insistence on making their original source explicit, e.g. '*C'est l'importante percée que vient d'annoncer l'équipe de virologie H. Koprowski...*' Other tendencies described are: marking the timing of D2 in relation to D1; explicit mention of the writer(s) of D2 and their readers; apposition as the principal method of glossing scientific terms for the lay reader – typographical marking of specialist terms; use of initials ('N.G.F.', 'E.E.G.') to confer validity/mystique to specialist terms; specific marking of simplification: '*on peut grossièrement représenter comme*', '*schématisation*'. '*Je parle pour d'autres*' is the keynote of this discourse aimed at the man in the street. The function of the formulation of the message is held to be in large part of a phatic one, with the communication of the scientific facts being rather a vehicle for this phatic function; which is 'to provide numerous readers with a comfortable representation of their own position relative to science'.

83-237 Cassirer, Peter. Regeln der alltäglichen Konversation als Grundlage der interpretativen Stilistik. [Rules of everyday conversation as a basis for interpretative stylistics.] *LILI: Zeitschrift für Literaturwissenschaft und Linguistik* (Göttingen, FRG), **11**, 43/44 (1981), 110-32.

A fundamental problem in hermeneutics has been to take the first step into the circle of understanding (Dilthey). It is here suggested that certain rules for ordinary conversation, put forward primarily by Grice, could be used as a systematic strategy for text interpretation. This strategy uses the rules mentioned as questions directed towards the text. These questions do not immediately concern the meaning of the text but rather the way in which propositions are formulated. In the light of this the method used could rather be called rhetoric or stylistics. The rules for normal conversation also seem to provide us with many of the standards from which most rhetorical devices have been said to deviate. Classical rhetoric, though, has been interested in describing *ars* rather than *natura* and hence the normal way of communicating has been the subject of research far less often than the deviations from it. The applicability of rhetorical aspects to a strategy for interpretation is demonstrated with the aid of a text by Pär Lagerkvist.

83-238 Conte, Rosaria (Inst. di Psicologia del CNR, Rome). Aspects of interaction in a medical interview. *Journal of Pragmatics* (Amsterdam), **5**, 2/3 (1981), 113-44.

Verbal and other interactive behaviour expressed by the participants of a paediatric interview are examined. Three models of discourse analysis are presented and applied to the analysis of the interview transcript. First, the interactants' verbal behaviour is analysed in terms of the speech act model. Methodological problems and critical issues concerning the speech act analysis are stressed. Second, the reconstruction is attempted of the goals pursued by the participants of the interview and of their interactive strategies. Particular attention has been paid to the doctor's handling of the interaction with both the patient and her mother. Goals and expectations of the latter are also discussed. Finally, questions are raised which are of some relevance for further research on doctor-patient interaction.

83-239 Dillon, J. T. (U. of California, Riverside). Categories of literature on questioning in various enterprises: an introduction and bibliography. *Language Sciences* (Tokyo, Japan), **3**, 2 (1981), 337-58.

Although questioning is a topic of concern in several fields, the burgeoning literatures remain on the whole unrelated across disciplines. Yet developments in one field can address issues in another field, as the various traditions are seen to complement or contradict one another. These possibilities are set forth in an introductory essay to a bibliography designed to introduce scholars to literature on questioning in a dozen fields of thought and practice. The listing is organised by disciplines, grouped under three main headings with 60 or more entries each: linguistic analysis, education, and other fields of practice. Various types of literature and various topics on questioning are included. Acquaintance with unfamiliar literatures can reveal the promising extent to which a multidisciplinary approach might advance present understanding and practice of questioning. [See *Bibliographies* section.]

83-240 Gutenberg, Norbert. 'Mit Fragen leiten'. Gesprächsleiteraufgaben und Sprechakttypen. Ein Beitrag zur Einbeziehung der Sprechakttheorie in die Didaktik der Gesprächserziehung. ['Lead with questions'. Aspects of discussion-leading and speech act types. A contribution to the inclusion of speech act theory in the teaching of discussion.] *Germanistische Linguistik* (Marburg, FRG), **1/2** (1979), 55-125.

A model of discussions based on Geissner is presented in two phases: defining the problem, in which the group continuously assembles and then categorises questions, opinions, impressions, suggestions; and deciding on a solution, in which members of the group take sides, argue, criticise, seek a consensus. Meaning-oriented (e.g. assembling, ordering) and process-oriented (e.g. polarising the group, centralising themes) aspects of the propositional content and perlocutionary effects of discussion-leading are expressed in the more concrete terms of speech acts, e.g. asking back, paraphrasing, introducing participants, interrupting. [The comparison is made with interactional procedure in restaurants and parliamentary debates.]

A 'sociogram' is given which charts in terms of speech acts the course of a discussion recorded in 1977 and transcribed using Winkler's notation for suprasegmentals. It is noted that the discussion was dominated by a leader who offered only 3 questions out of 29 utterances, and that in a sociogram designed for maximum co-operation in the group 13 questions occur. Speech acts, which are already part of our general knowledge, can themselves form the aims of a course on discussion and communication; and Geissner's exercises on speech cognition can easily be used to practise the recognition and acquisition of speech acts.

83-241 Jefferson, Gail (U. of Manchester) and **Lee, John R. E.** The rejection of advice: managing the problematic convergence of a 'troubles-telling' and a 'service encounter'. *Journal of Pragmatics* (Amsterdam), 5, 5 (1981), 399-422.

A recurrent phenomenon in talk about a 'trouble' is the rejection of advice. This phenomenon is explored as a possible consequence of a convergence between two closely-related but distinctive environments for talk about a 'trouble', the Troubles-Telling and the Service Encounter. Each of these has its own appropriate activities and its own appropriate relationships between participants; only one of these, the Service Encounter, may have advice-giving as a proper component. The rejection of advice in a Troubles-Telling may, then, constitute an attempt to counteract the environmental shift, and the attendant shift of activities and relationships, implicated thereby.

83-242 Kreckel, Marga. Tone units as message blocks in natural discourse: segmentation of face-to-face interaction by naive, native speakers. *Journal of Pragmatics* (Amsterdam), 5, 5 (1981), 459-76.

The question pursued in this research is: How do naive native speakers parse natural interaction when instructed to detect the messages the speaker tries to convey? The two studies reported here show conclusively that coders base their decisions as to where particular messages start and end on tone unit boundaries. That is, they give priority to intonative features as opposed to syntactic ones. Tone units can thus be regarded as corresponding to the implicit linguistic knowledge of naive native speakers.

83-243 Lacoste, Michèle. The old woman and the doctor: a contribution to the analysis of unequal linguistic exchanges. *Journal of Pragmatics* (Amsterdam), 5, 2/3 (1981), 169-80.

From tape recordings of hospital consultations, several types of interaction between patient and physician during medical interviews are analysed in three successive perspectives: (1) the incidents which arise from the fuzziness of the boundaries between the speech territories of patient and doctor respectively; (2) the success v. failure of the patients' 'initiatives'; (3) the possible effect of an interactional strategy depending on a so-called 'dramatisation competence'. These examples show how, in an unequal and strongly codified situation, negotiations can nevertheless happen

through the adjustment of pragmatic abilities to interactional behaviour. Thus, a link between pragmatics and the sociological study of oral conversation in institutional settings proves necessary.

83-244 Manor, Ruth. Dialogues and the logics of questions and of answers. *Linguistische Berichte* (Wiesbaden, FRG), **73** (1981), 1-28.

In pursuit of the broad goal of integrating semantics and pragmatics, Manor argues that the acts of asserting and questioning are not mutually exclusive: in performing either act a speaker 'puts a proposition in question' with differing degrees of commitment to its truth. In presupposing, on the other hand, a speaker is automatically committed to the truth of the proposition presupposed; such a commitment can be avoided by the use of conditionals as in *If John used to beat his wife, he stopped*. These observations can be represented by assigning an operator, *d*, to a speech act, indicating the degree of commitment made by the speaker in uttering it. It is argued that dialogues differ in the extent to which they are co-operative, and hence also in the conversational rules governing them; a gambling game is outlined as a model for 'incooperative' dialogue.

83-245 May, John D. (U. of Queensland). Practical reasoning: extracting useful information from partial informants. *Journal of Pragmatics* (Amsterdam), **5**, 1 (1981), 45-59.

Three accounts of implicature – those of Nowell-Smith, Grice, and Foeplin – allow utterances to generate implicatures only about speakers' intentions, not about matters of fact. But the utterance of 'It is raining' will normally invite the addressee to infer that it is raining not just anywhere, but 'here'. Further, Grice's account is restricted to disinterested, co-operative exchanges. Several examples are given of persuasive communication – mostly advertising material – and a new set of maxims proposed that will explain the inferences generated. These are: Veracity: advertisers are 'vulnerable' and can be held responsible for their claims; Best Face: assume that the strongest possible claim is being made; Normative Partiality: the choice by an advocate of a criterion implies that his 'product' compares favourably with competitors according to that criterion; Empirical Partiality: interested advocates can only be expected to furnish information favourable to their cause; and Elision as Concession: where a crucial claim is not made, assume that it cannot justifiably be made.

83-246 Moeschler, Jacques (U. of Geneva). Discours polémique, réfutation et résolution des séquences conversationnelles. [Argumentative discourse, refutation and resolution of conversational sequences.] *Études de Linguistique Appliquée* (Paris), **44** (1981), 40-69.

This paper examines the interactional consequences of negative verbal reactions to proposals in conversation, drawing on invented examples and on two short extracts of real data: one from the radio programme *Pour et Contre*, on the subject of demonstrations in Zurich (10.9.80) and the other from *Masque et Plume* discussing the film *Le Piège à Cons* (28.10.79). A classification of interactional rules is proposed

and exemplified with invented examples. This is then imposed on the data. Two levels are distinguished: logico-linguistic (= speech acts) and interactional (= behaviour of participants). The variety of metalinguistic categories proposed are claimed to allow a multidimensional approach to the data. The conclusion drawn is that closure of an argumentative interaction depends on the 'principle of cyclic saturation' which appears to mean that both participants maintain their opposing points of view.

83–247 Müller, Klaus (U. of Saarland). Interaktionssemantik. [The semantics of interaction.] *Deutsche Sprache* (Berlin, FRG), **4** (1980), 289–305.

A theory of language is developed based on vagueness, shared knowledge and active speaker–hearer co-operation. Lakoffian hedging expressions which indicate more (e.g. *eine Art*) or less (e.g. *genau gesagt*) fuzziness are placed in a theory of meaning linked to a model of communication, and the latter is reformulated in terms of conversational maxims with specific interactional consequences. For example, hedges which indicate more fuzziness determine peripheral meanings and have as their underlying interpretative procedure a 'signalled *et cetera* assumption'. This is the conversational maxim *Don't take me literally!*, and is common because it leaves the hearer with a wide range of possible interpretations. The article draws on ideas in ethnomethodology, on Hörmann's semantic features model of meaning, on memory in Artificial Intelligence, and on *gestalt* psychology.

83–248 Oksaar, Els (U. of Hamburg). Kommunikative Akte und Textanalyse am Beispiel von dialogischen Erzähltexten. [Communicative acts and discourse analysis, exemplified by narrative dialogue texts.] *Zeitschrift für Germanistische Linguistik* (Berlin, FRG), **9** (1981), 129–51.

The aim of this article is to introduce a new unit of author and textual analysis, the 'communicative act'. The communicative act goes beyond statistical analysis to qualitative considerations, and subsumes the total framework of action – both verbal and paralinguistic – within which a speech act occurs. A model is presented of the ways in which a narrator transposes the parameters of a dialogue, in all their simultaneity, into linear, written language. An author may introduce a dialogue with the neutral *sagen*, or text-perspectively with *antworten*. Paralinguistic features are conveyed by adverbs, e.g. *laut*, by verbs, e.g. *lachen*, or by set structures such as Verb + *mit* + NP, e.g. *sagte mit lauter Stimme*. And an author can explain the significance of an actor's utterance metalinguistically. Extracts from 20th century narrative literature are used to illustrate the points made. There is a discussion of 'interactional competence', and of the comprehensibility of communicative acts in terms of 'balanced' and 'unbalanced stimulation'.

83–249 Singh, Rajendra and Stanton, Jo-Ann (U. of Montreal). Cohesion and social stratification. *ITL* (Louvain), **56** (1982), 1–10.

The results are presented of a preliminary investigation of the differential exploitation of linguistic cohesion devices by different social strata. Three groups (upper, middle, and lower) of native speakers (16 in all) of Quebec French provided the data. Their

discourses were analysed with respect to three major types of cohesion devices – syntactic, semantic, and lexical, and including: deletion, pronominalisation, identity of derivation, lexical repetition, morphological derivation, synonymy, converse terms, and hyponymy. The domain of investigation was what Sachs has called an ‘adjacency pair’.

The results support the general hypothesis that cohesion devices are indeed differentially exploited by different social strata (though the differential exploitation is of a marked type only at the end points of the socioeconomic scale). They also support the contention that what varies is not the coherence but the set of devices used to achieve it. The ‘lower’ group, for example, uses a higher proportion of lexical repetition than the other two groups.

83–250 Sonne, Harly and Rosenbaum, Bent (Sankt Hans Hospital, Roskilde, Denmark). Psychosis, psychiatry and the science of text. *Journal of Pragmatics* (Amsterdam), 5, 2/3 (1981), 205–21.

This article presents a clarification of the role of language and speech in psychiatry, with special regard to the treatment of psychosis in the institution. The psychiatric institution is viewed as a network of significative processes materialised in the institutional discourse, and the role of speech in psychotherapy is discussed in relation to the kinds of discourse normally practiced in mental hospitals.

In order to investigate these relations, the concepts of reality and transference are analysed, according to the developments of structural (Lacanian) psychoanalysis and the science of text. The substantial changes of language and speech in psychosis are described as changes of enunciation and discourse. These changes of enunciation and discourse are looked upon as closely connected with the dynamic process of the imaginary body, the concept of which is discussed. It is necessary to involve the science of text in order to understand and fully interpret psychotic speech and thought, and, moreover, what happens in the psychiatric institution in general.

83–251 Street, Richard L., Jr. Evaluation of noncontent speech accommodation. *Language and Communication* (Oxford), 2, 1 (1982), 13–31.

The paper presents an experimental investigation of accommodation theory in noncontent aspects of speech (specifically, speech rate, pause length or ‘response latency’, and utterance duration). It was hypothesised that the relationship between convergence on these dimensions and favourable evaluation of the converging/diverging speaker would be either positively linear or curvilinear. For response latency, the linear hypothesis was supported; utterance duration accommodation effects on ‘confidence’ judgements also suggest support for this hypothesis, though effects on ‘social attractiveness’ judgements support neither hypothesis. No positive effects were demonstrated for convergence of speech rate, though divergence in rate was negatively evaluated. No support was given to the hypothesis of curvilinear relationship. The research also considers the interactions between these three aspects of noncontent speech and subjects’ conscious awareness of accommodation. A majority of subjects were found to be very aware of response latency and its accommodation,

and of divergent speech rates, but only half perceived utterance duration modifications.

83–252 Tannen, Deborah (Georgetown U.). The machine-gun question: an example of conversational style. *Journal of Pragmatics* (Amsterdam), **5**, 5 (1981), 383–97.

To exemplify the term ‘conversational style – a way of accomplishing conversation – the author presents an analysis of the use of the ‘machine-gun question’ by three New Yorkers in a conversation involving five participants in all. The ‘machine-gun question’ combines such features as fast pacing, pitch shift, reduced syntactic forms, ‘co-operative overlap’, the expectation that more than one speaker can talk simultaneously and a preference for personal focus of topic. It was used by the New Yorkers to carry a metamessage of rapport, to establish community. The non-New Yorkers, however, regarded it as an imposition which worked contrary to its desired effect.

83–253 Willer, Bernhard and Groeben, Norbert [Psychologisches Inst. Heidelberg]. Sprachliche Hinweise auf ironische Kooperation: Das Konzept der Ironiesignale unter sprechakttheoretischer Perspektive re-konstruiert. [Linguistic clues to co-operation in irony: the concept of the signalling of irony reconstructed from a speech act theoretical perspective.] *Zeitschrift für Germanistische Linguistik* (Berlin, FRG), **8**, 3 (1980), 290–313.

To signal irony is to interfere with the literal interpretation of an utterance. The ways in which this can be achieved are grouped here deductively into six categories (each with sub-categories), in which conventions are broken at six different levels, ranging from the phonological/graphemic level (e.g. *Als Psychologe müßte man das doch wissen*) through the transposition of syntagms at the morpho-syntactic level (e.g. *Nette Eltern hab ich da!*) and the incompatibility of sememes at the intensional level to the violation of conversational maxims such as those of quantity and relevance. The classification is tested on a sample of 140 examples of irony and a statistical break-down given of the number of examples found per (sub-)category. With the aid of this system of categories one can approach the key questions of whether more linguistic signalling of irony occurs as contextual clues decrease, and whether irony is the deliberate violation of the sincerity principle.

83–254 Wootton, A. J. (U. of York). The management of grantings and rejections by parents in request sequences. *Semiotica* (The Hague), **37**, 1/2 (1981), 59–89.

A corpus of 100 request sequences involving four-year-old children and their parents is analysed. Parents’ initial nongranteeing turns after requests are organised so as to minimise the occurrence of outright refusals. Minimisation techniques include delays, the omission of stated refusals and the mitigation of such refusals where employed. Parents show a marked preference for granting in the organisation of their initial turns after requests, but when they do refuse a request and they are faced with a child making appeals, they can show their unwillingness to change their minds by lapsing the

preference organisation, i.e. they either move sequentially toward more negative forms, e.g. from a deferment like *You can go out later* to *No, not just now*, or they use outright nongranteeing forms such as plain *No*. Two kinds of stated refusals are distinguished and possible implications of the differential sequential placement of these refusals are discussed.