Research in the supporting sciences

LINGUISTIC THEORY

82–455 Cercone, Nick (Simon Fraser U., Burnaby, BC) **and Mercer, Robert** (U. of British Columbia, Vancouver). Design of lexicons in some natural language systems. *ALLC Journal* (Cambridge), **1**, 2 (1981), 37–54.

An investigation of certain problems concerning the structural design of lexicons used in computational approaches to natural language understanding. Three aspects of lexical design appear especially noteworthy: (1) retrieval of relevant portions of lexical items from the lexicon; (2) the storage requirements of the lexicon; and (3) the representation of meaning in the lexicon. Lexicons are considered from a variety of sources; where appropriate, explicit comparisons are made between the lexical structures of Cercone (1975), Winograd (1972), Schank (1973), Wilks (1973), and Woods *et al.* (1972).

82–456 DeLancy, Scott (U. of Colorado). An interpretation of split ergativity and related patterns. *Language* (Baltimore, Md), **57**, 3 (1981), 626–57.

Nominative/absolutive case and verb agreement are, in many languages, indicators of a category which is here called 'viewpoint': the perspective from which the speaker describes the event. The order of NP constituents in a sentence encodes 'attention flow', which is the order in which the speaker expects the hearer to attend to them. Split ergative case-marking patterns are shown to reflect conflicts between the most natural viewpoint and attention-flow assignments. It is argued that the characterisation and grammatical marking of an event as first-hand or inferred knowledge for a speaker, and as intentional or inadvertent for an actor, can be described in terms of whether the entire event or only its terminal phase is directly accessible to the conscious mind of the speaker and the actor, respectively: and that these categories can also be described in terms of attention flow and viewpoint.

82–457 Horn, Laurence R. (U. of Wisconsin-Madison). A pragmatic approach to certain ambiguities. *Linguistics and Philosophy* (Dordrecht), **4**, 3 (1981), 321–58.

Equative sentences like (1) *Mary regrets she's as tall as she is* (the embedded clause of which allows a tautological reading) are distinguished from comparative sentences like (2) *Mary believes she's taller than she is* (whose embedded clause allows a contradictory reading). A non-tautologous reading for an apparently tautological equative is impossible when the clause is asserted but often available when the clause is embedded, providing it can be taken as pragmatically presupposed. In the context of a discussion of comparatives, Postal's 'island facts' are examined, and it is argued that his syntactic movement-rule account is better replaced by a functional explanation which makes use of notions of theme and rheme and old and new information present

in the sentence. Postal has real difficulty in explaining why a *de re*, and hence non-tautologous, reading is available for (3*a*) *That Mary is as rich as she is is surprising* while in the same syntactic construction, no *de re*, non-contradictory reading is available for the parallel comparative case (3*b*) *That Mary is richer than she is is believed by Jack*. The reason is that the first clause of (3*a*) satisfies the functional appropriateness condition that initial position clauses must be thematic and non-controversial.

82–458   Vlach, Frank (U. of New South Wales, Kensington). Speaker's meaning. *Linguistics and Philosophy* (Dordrecht), **4**, 3 (1981), 359–91.

Six types of examples problematic to the Gricean or evidential account of speaker meaning are discussed: those in which (*a*) understanding relies solely on the utterer's (U's) sincerity; (*b*) U is not trying to get A (the audience) to believe P (the expressed proposition); (*c*) U intends A to believe P on the grounds that it is a logical conclusion from some mutually known set of propositions; (*d*) U presents direct evidence for P; (*f*) U says x (the utterance) simply because it is his duty to do so. Several other proposals – by Bennett, Armstrong, and Grice himself – for modifying the Gricean account are shown to fail. Searle's account in terms of commitment does not offer an essentially different explanation of these cases, but it does deal somewhat more adequately with two other types of problem instance: audienceless utterances and Bennett's 'contrived cross-purposes'. Difficulties remain with the notion of commitment itself, although some such concept is probably indispensable to the definition of speaker meaning. However, in the philosophical writings on the subject, 'theory' and 'definition' or speaker meaning have been conflated, and should be distinguished; Grice's work should be seen as a contribution to the former, rather than the latter.

LINGUISTIC DESCRIPTION AND ANALYSIS

82–459   Green, Georgia M. Pragmatics and syntactic description. *Studies in the Linguistic Sciences* (Urbana-Champaign), **11**, 1 (1981), 27–37.

It has long been recognised that the acceptability of example sentences under test conditions depends on what the informant believes about the 'real world', and particularly about the beliefs and intentions of the presumed speaker of the example sentences. After providing several detailed examples of the phenomenon, a history is given of how it has been dealt with by generative grammarians. It is argued that the problem is not strictly within the province of grammar; rather, the grammar should be designed to generate freely such forms as *she knows who did I appoint* and a general theory of communication, as sketched here, should provide principles regulating its potential use.

82–460   Householder, Fred W. (Indiana U.) Subordinate future clauses. *Forum Linguisticum* (Lake Bluff, Ill), **4**, 3 (1980), 212–23.

The constraints on the occurrence of future tense (i.e. the *will* form) as opposed to present in subordinate clauses with future time reference can be acounted for pragmatically. Future tense can be used in subordinate future clauses only if that

proposition is being asserted (i.e. confidently predicted); such assertion is possible only for causal, adversative and result clauses. Evidence from classical Greek is presented to support the distinction between such clauses and conditional, temporal and relative clauses. Causal, adversative and result clauses (in addition to indirect statements, fact clauses and non-conditional relative clauses) thus allow the full range of verbal constructions which occur in independent sentences, and also show other 'main clause phenomena' such as 'root transformations'. However, these facts do not strongly support the performative analysis, as argued by Sampson.

PHONETICS AND PHONOLOGY

82–461   Clayton, Mary L. (Indiana U.) Word boundaries and sandhi rules in Natural Generative Phonology. *Language* (Baltimore, Md), **57**, 3 (1981), 571–90.

This paper examines the claims in Natural Generative Phonology (NGP) that phonetically conditioned rules do not make reference to word boundaries, and that sandhi rules constitute a type of rule 'intermediate between P-rules and MP-rules'. It is concluded that sandhi rules without (other) morphosyntactic information are like P-rules except for the presence of a word boundary, supposedly a non-phonological boundary. If this is the only reason for separating these sandhi rules from P-rules, then the difference is merely one of definition; and the claim that P-rules may not be conditioned by word boundaries is vacuous, since it is true by definition. The reason that proponents of NGP insist upon the exclusion of word boundaries from P-rules is their adherence to a requirement that no non-phonological information play a part in phonological generalisations. If it can be demonstrated that word boundaries do indeed play a part in P-rules – and if, further, the definitions of 'P-rule' can be established without circulatory (i.e. without including or excluding word boundaries by definition) – then one of the major distinguishing tenets of NGP is shown to be without basis, since it is clear that word boundaries are indeed not purely phonological.

82–462   Fallows, Deborah (Center for Applied Linguistics, Washington, DC). Experimental evidence for English syllabification and syllable structure. *Journal of Linguistics* (Cambridge), **17**, 2 (1981), 309–17.

Current syllable theories describe syllabification of words according to some combination of four principles: restrictions on segment sequences, a maximal onset criterion (regarding consonant clusters as syllable-initial), and principles of stress (stressed syllables attracting the maximum number of consonants both initially and finally) and ambisyllabicity (neighbouring syllables sharing internuclear consonants). The validity of these criteria was tested experimentally using groups of children, in which the subjects were asked to reduplicate syllables. The results showed that preferred syllable shape in English is CV if the V is tense and CVC if the V is lax, and also that in multisyllabic words stressed syllables are assigned structure preferentially, at the expense of unstressed syllables. In addition, intervocalic liquids or nasals are likely to be treated as 'ambisyllabic', thus preserving the shape of both the stressed and unstressed syllable. The experiment also showed that basic syllable constraints are acquired at least by the age of five.

82–463   Greenlee, Mel (U. of N. Iowa) **and Ohala, John** (U. of California, Berkeley). Phonetically motivated parallels between child phonology and historical sound change. *Language Sciences* (Tokyo), **2**, 2 (1980), 283–308.

There is a long history of speculation in linguistics about the role of children, i.e. first language learners, in sound change. Many assume that the child is the initiator of sound change. More recently, however, important differences have been brought to light between child language phonology and diachronic phonology, thus calling into question the role of the child language learner in sound change. In this paper, several cross-language parallels are documented between phonological processes exhibited by children learning their language and in 'adult' phonology, i.e. allophonic variation, diachronic processes, dialect variation, etc. All are processes which can be explained phonetically by reference to acoustic-auditory factors. It is argued, however, not that the 'adult' sound patterns originated in child phonology, but that both stem from the same underlying physical phonetic causes, i.e. that both child and adult create such sound patterns independently, because they both possess the same phonetic apparatus. The question 'Who initiates sound change?' cannot, therefore, be answered by citing parallels, or lack of them, between child and adult phonology. Rather, we need to know who it is, child or adult, who is more likely to have his/her pronunciation mistakes copied by others, so leading to a pronunciation change characteristic of a whole linguistic community. [Bibliography – for details, see **15**, 3, p. 253.]

82–464   Keller, Eric and Ostrey, David. Zur Frage der motorischen Kontrolle der Sprechbewegungen: Ultraschallmessungen von Sprechbeginn und Bewegungsparametern. [The motor control of speech movements: ultra-sound measurements of speech onset and movement parameters.] *Weiner Linguistische Gazette* (Vienna), **25** (1981), 37–60.

Preliminary results of articulatory investigations are presented (1) concerning Chomsky and Halle's (1968) 'neutral position' as a point of reference in the definition of a binary classification system for vowels, and (2) concerning the real-time specification of articulatory movement. The research involves ultrasound analysis techniques recently developed in the authors' laboratory. It is shown that for the measurement of articulatory movements in the palato-lingual, velo-lingual and pharyngeal constrictions, ultrasound represents a viable alternative to X-ray techniques. Some advantages and shortcomings of ultrasound measurements are indicated. The preliminary data support the notion of an articulatory set (the 'basis of articulation') different from a vegetative setting of the velo-lingual constriction, but offer no support for Chomsky and Halle's 'neutral position'. Also, the data support the notion that at a given speaking speed, the articulatory system sets the distance (rather than the time) for a given articulatory movement. A model for articulatory movement is suggested which is compatible with the data.

82–465   Pederson, Lee (Emory U.). Studies of American pronunciation since 1945. *American Speech* (Alabama, USA), **52**, 3/4 (1977) [publ. 1981], 262–327.

This survey limits itself to phonetic and phonological research, covering (1) elements of pronunciation study (consonants, vowels, prosody, paralanguage), (2) varieties of pronunciation study (historical, dialect, language contact), and (3) applications of pronunciation study (in historical descriptions, instructional texts, dictionaries). [Bibliography – see *Bibliographies* section.]

82–466   Wheeler, Cathy J. On the relationship between phonology and psychology. *Papers in Linguistics* (Champaign, Ill), **13**, 1 (1980), 51–100.

The theory of generative phonology and its offshoots claim psychological reality, yet most phonological research is not psychological. Most phonologists are still behaving like non-mentalist describers of language data. Many of them mistakenly regard language data as providing valid psychological evidence, and confuse the psychological hypothesis of maximally general grammars with parsimonious description of language data. Even psychologically-oriented phonologists primarily produce analyses of, and arguments about, phonological not psychological data. They make many assumptions about internalised grammars which they fail to state as explicit hypotheses and test empirically against valid psychological data.

SOCIOLINGUISTICS

82–467   Bernstein, Basil (U. of London). Codes, modalities, and the process of cultural reproduction: a model. *Language in Society* (London), **10**, 3 (1981), 327–63.

Class relations generate, distribute, reproduce, and legitimate distinctive forms of communication, which transmit dominating and dominated codes; subjects are differentially positioned by these codes in the process of their acquisition. The distribution of coding orientations depends on the distribution of power created by the social division of labour, which in turn transforms and reproduces differential orientations in the family. Institutionalised education is fundamental to the availability, distribution and realisation of elaborated codes; the fundamental message of a pedagogic practice is the rule for legitimate communication. Class codes and their modalities are specific semiotic grammars that regulate the acquisition, reproduction and legitimation of fundamental rules of exclusion, inclusion and appropriation by which subjects are selectively created and positioned, but which do not necessarily have the conditions of their cultural reproduction located in the social division of labour; variation, opposition and change inhere in the possibilities of code.

82–468   Bokamba, Eyamba G. Language and national development in Sub-Saharan Africa: a progress report. *Studies in the Linguistic Sciences* (Urbana-Champaign), **11**, 1 (1981), 1–25.

This paper discusses the role of language in personal and national development in Sub-Saharan Africa. The study is subdivided into two major parts. The first part

discusses development in general terms, and presents a critical evaluation of African developmental goals against the background of the 1961 UNESCO/UNECA Conference of Ministers of African Education, held in Addis Ababa, Ethiopia, using comparative statistics on literacy and educational attainment in an attempt to assess the current level of general development. The second part proposes a developmental model which takes the university and other institutions of higher learning as the central agents of development. This model calls for a fundamental restructuring of the entire educational system, an increased emphasis on functional literacy for adults, and the reformulation of the current language policies to accord with the new objectives. The proposed model is argued to be more compatible with and realistic to Sub-Saharan African needs than the current European-based approach.

82–469   Cheshire, Jenny (U. of Bath). Dialect features and linguistic conflict in schools. *Educational Review* (Birmingham), **34**, 1 (1982), 53–67.

This paper analyses some of the educational problems that can arise from a lack of awareness of the systematic differences between standard English and non-standard English dialects. Research in Reading, Berkshire, found that children used fewer dialect features in writing than in their vernacular speech style, but that they also used a number of hypercorrect forms in writing that did not occur in speech. The marking strategies that teachers adopted could not help their dialect-speaking pupils. The linguistic and more general implications of this situation are extremely serious, since the majority of school children in Britain speak a non-standard variety of English.

82–470   Fasold, Ralph W. (Georgetown U.). The amazing replicability of a sociolinguistic pattern. *Papers in Linguistics* (Champaign, Ill), **13**, 3 (1980), 515–28.

The interaction of linguistic variability and social factors has often been demonstrated in sociolinguistic research. Similar patterns have been found in studies done with different populations and even with more than one data set drawn from the same sample, but never have similar patterns been reported from repeated sampling from the same population. In the study reported here, the interaction between class and race and the pronunciation of the vowel nucleus in the word *mine* was found to be replicable at a high degree of statistical significance in twelve samples drawn from speakers in Washington, DC over a six year period. At the same time, no significant patterns were observed in the samples when sex and age were correlated with the same pronunciation.

82–471   Hasan, Ruqaiya. The implications of semiotic distance for language in education. *Working Papers of the Speech and Language Research Centre* (North Ryde, NSW, Australia), **2**, 5 (1980), 1–35.

The 'semantic distance' between two communities is a result of the different organising principles they use to create consistencies of meaning. Study of patterns of consistency in the body of meanings habitually and characteristically transacted within a community is preferred to any atomistic approach to the study of semantics. Semantic distance can obtain both inter- and intra-lingually, the latter instance having

educational implications. For example, it is a causal factor in the poor performance of 'slow' students, i.e. their learning difficulties may be explained by a lack of familiarity with the academic register used by educators. Such difficulties associated with semantic distance may well be problematical but should not be ignored.

82–472   Pfaff, Carol W. (Free U., Berlin). Sociolinguistic problems of immigrants: foreign workers and their children in Germany (a review article). *Language in Society* (Cambridge), **10**, 2 (1981), 155–88.

This paper reviews the work on sociolinguistic aspects of the recent immigration of foreign workers and their families from Southern Europe and the Mediterranean countries of the Middle East and North Africa to West Germany. The continued presence of these foreigners presents almost laboratory conditions for the investigation of the initial and subsequent stages of contact-induced linguistic development in adults and children. The situation is particularly interesting here because many of the languages involved (Turkish, Arabic, Greek, Serbo-Croatian, Spanish, Italian and Portuguese) are typologically different from each other and from German.

Since much of the discussion appears in journal articles and conference reports rather than books, this review is organised in terms of themes and theoretical issues. Section 1 briefly summarises the sociopolitical background, Sections 2–5 focus on social aspects of the situation, treating the sociolinguistics of pidginisation (2), creolisation (3), foreigner talk (4), and bilingualism in the second generation (5) in social context. Sections 6–8 focus on linguistic phenomena *per se*, treating simplication (6), transfer from L1 (7), and developmental stages (8) as problems in the analysis of linguistic variation that in turn reflect on fundamental principles of language universals and psycholinguistic processing. Section 9 returns to the sociopolitical realm, reviewing attempts to put sociolinguistic theory and findings into practice – particularly in language teaching. A list of the major sociolinguistic studies is provided in an appendix.

82–473   Willemyns, Roland (Free U. of Brussels). Die Sprachsituation in Belgien unter soziolinguistischen Aspekten. [The language situation in Belgium from a sociolinguistic point of view.] *Linguistische Berichte* (Wiesbaden, FRG), **75** (1981), 41–59.

In Belgium today where Netherlandish, French, and to a small extent German, are spoken, language is an issue of crucial political importance, which, if unresolved, could have serious implications for the country's future. Although by 1932 Flemish had won back from French its rightful place as the official language of Flanders, Brussels itself is still primarily French-speaking. Because so many varieties of Netherlandish are used in Flanders, it has proved very difficult to establish a norm which is acceptable to all sides, though it seems that there is a growing general awareness of the need to adopt a standard high form.

PSYCHOLINGUISTICS

82–474 Barrett, Martyn D. (Roehampton Inst.). The holophrastic hypothesis: conceptual and empirical issues. *Cognition* (Lausanne), **11**, 1 (1982), 47–76.

A conceptual distinction is drawn between a structural and a functional version of the holophrastic hypothesis. The structural version of this hypothesis views the single-word utterances of children as implicit expressions of either syntactic or semantic structural relations, while the functional version views each of these utterances as consisting of a single lexical item which is used for a particular communicative function. The arguments which have been proposed in favour of these two versions of the hypothesis are critically examined in the light of the empirical evidence which is currently available. It is concluded that this evidence only supports the functional version of the holophrastic hypothesis, there being no evidence available to support the interpretation of children's single-word utterances as implicit expressions of either syntactic or semantic relations.

82–475 Black, Maria (U. Coll., London) **and Chiat, Shalamuth** (Sch. for the Study of Disorders of Human Communication, London). Psycholinguistics without 'psychological reality'. *Linguistics* (The Hague), **19**, 1/2 (1981), 37–61.

The usefulness of the notion of 'psychological reality' – the metatheoretical assumption that linguistic concepts and theories have psychological status – is called into question. It is argued that rejection of the psychological interpretation of the 'realist' position with regard to grammar would have no effect on the practice of theoretical linguists as the notion plays no part in the motivation of linguistic concepts or in linguistic argumentation. The notion is more of a hindrance to the argument against empiricist learning theory as it has created the impression that linguistic hypotheses can only be empirically tested by recourse to extra-linguistic information. Furthermore, it has seriously hampered the development of psycholinguistic theory as many psycholinguists have seen it as their task to find psychological correlates of linguistic concepts and such pursuits have not exactly been fruitful.

Linguistics can contribute to psycholinguistics inasmuch as it provides an initial or auxiliary theoretical vocabulary for the description of psycholinguistic phenomena and the formulation of many psycholinguistic questions, and, in addition, to this it sets constraints and requirements on processing models by specifying both the general properties of language and the specific properties of individual languages.

82–476 Bradac, James and others. On the neglected side of linguistic science: multivariate studies of sentence judgment. *Linguistics* (The Hague), **18**, 11/12 (1980), 967–95.

The results are reported of three studies which investigate the role of stimulus and organismic factors in sentence judgements. This research grows out of the authors' concern with the empirical basis of linguistics, with the kinds of data which are (or should be) used to test linguistic hypotheses in attempts to falsify theories (grammars). Subjects in the three studies were 106 persons with various degrees of linguistic

sophistication, each of whom completed one of three tasks involving judgements of sentences. Among other things, four factors were found underlying sentence judgements, one of which was a grammaticality-acceptability factor. A type of person was isolated, who was labelled 'naïve grammarian'. 'Naïve grammarians' discriminate between theoretical or foreign errors on the one hand and grammatical sentences or strings exhibiting particular native errors on the other. Linguistic training apparently influences judgements of sentences. These and other results are discussed in terms of 'mere exposure' and processing difficulty, and implications for linguistic theory are sketched. If 'naïve grammarians' are quite homogeneous in their judgements of sentence grammaticality, and if their judgements differ from those of linguists, whose judgements do we use to test linguistic hypotheses? It is suggested that the judgements of linguists are not necessarily preferable. In fact, linguists' judgements may be artifactual to some extent, warped by their strong theories.

82–477   Bruner, Jerome. The social context of language acquisition. *Language and Communication* (Oxford), **1**, 2/3 (1981), 155–78.

The acquisition of two specific language functions – indicating and requesting – is described, in support of the view that the pragmatic aspects of language underpin acquisition of the more formal (syntactic and semantic) aspects. Earlier, more simplistic models of language acquisition have been modified to take account of the situated nature of the learning process. Four innate communicative intentions govern children's early acquisition of language: the achievement and regulation of joint attention with another; seeking help; affiliation and co-ordination with others; pretence and simulation. Indicating related to the first of these, and is shown to develop out of the conventionalising and formatting of a natural function. Requesting primarily serves the second function and likewise emerges in the context of a Language Assistance System (LAS) which precedes the activation of the child's innate Language Acquisition Device (LAD). The speed of language acquisition can partly be explained by viewing it as successively substituting the higher forms of linguistic realisation for already established communicative conventions, but partly also by the operation of an LAD that recognises linguistic regularities of a form that are shaped by a matching LAS. The interaction between these two systems should be studied by both psychologists and linguists.

82–478   Engel-Ortlieb, Dorothea. Discourse processing in aphasics. *Text* (The Hague), **1**, 4 (1981), 361–83.

Text-linguistic theory claims that neither words nor sentences but texts are the basic units of communication. If this is true, aphasics suffering from language disorders caused by brain disease should be able to manage discourse better than, for instance, words or sentences.

Twenty-five fluent and 25 non-fluent aphasics, as well as three control groups (brain-damaged but non-aphasic patients, healthy people, and schizophrenics) were asked to recall four short and simple stories, 75 words in length, referring to everyday matters such as 'shopping' or 'going to the pictures'. Aphasics produce significantly

more comments (stereotyped expressions, ready-made and standard phrases) than do controls. In spite of significantly lower results in number of propositions recalled, both aphasic groups were capable of sequential organisation of propositions, maintenance of a story schema and production of well formed titles.

It is argued that aphasics have fewer problems in handling holistic structures, whether on the production side (comments) or more cognitively based (story schema, titling). Discourse seems to be governed by complex but holistic organising principles that are – interestingly enough – easy to handle. This may be one reason why discourse is considered to be the basic unit of communication.

82–479 Garnham, Alan and others (U. of Sussex). Referential continuity and the coherence of discourse. *Cognition* (Lausanne), **11**, 1 (1982), 29–46.

Two experiments were carried out to investigate the role of referential continuity in understanding discourse. In experiment 1, a group of university students listened to stories and descriptive passages presented in three different versions: the original passages, versions in which the sentences occurred in a random order, and randomised versions in which referential continuity had been restored primarily by replacing pronouns and other terms with fuller and more appropriate noun phrases. The original stories were remembered better, and rated as more comprehensible, than the random versions, but the restoration of referential continuity ameliorated the effects of randomisation. The descriptive passages had little referential continuity from one sentence to the next, and as expected the effects of randomisation on comprehensibility and memory were negligible. In experiment 2, a group of skilled comprehenders and a group of less skilled comprehenders were selected from a population of 7–8-year-old children. The difference between the groups was known to be largely their inferential ability in reading texts. Both groups read a series of short stories presented in the same three versions as used in the previous experiment. As predicted, the ameliorating effects on memory of restoring referential continuity in a randomised story were confined to the skilled group. The results are discussed in relation to the theories of story grammar, text microstructure, and mental models of discourse.

82–480 Goodluck, Helen (U. of Wisconsin-Madison) **and Tavakolian, Susan** (Ohio State U.). Competence and processing in children's grammar of relative clauses. *Cognition* (Lausanne), **11**, 1 (1982), 1–27.

A report on two toy-manipulation experiments investigating 4–5-year-old children's interpretations of relative clauses. The first experiment shows that the frequency with which relatives modifying the matrix direct object are interpreted as referring to the matrix subject is sensitive to the nature of the material in the relative. Animacy of the relative direct object leads to an increase in subject coreference errors for relatives; a similar effect of animacy was not found for infinitival complements. Such errors arise when the child's sentence processor is taxed. In the second experiment children's interpretations of relatives are compared with their interpretations of temporal participial complements. Children eschewed coreference between the complement and the object of a passive prepositional phrase in the case of temporal participials

but not in the case of relatives. This result is interpreted as evidence that children are capable of analysing relatives as constituents of the NP node, and hence that this node is recursive in their grammars. The results of both experiments are discussed in the context of a two-stage parsing model; the data fit a picture of children's linguistic abilities in which the 4-year-old has a sophisticated competence grammar and a parsing mechanism of essentially the same structure as the adult's. This approach is compared with a number of other approaches to children's relative clause interpretations in the literature; it is argued that these alternatives are too structure-specific and can lead to underestimations of the child's competence grammar. This analysis is compatible with a picture of acquisition in which the child's competence grammar of relatives is not qualitatively different from the adult's.

82–481   Macaskill, Ann (U. of Aberdeen). Language acquisition and cognitive development in the acquisition of kinship terms. *British Journal of Educational Psychology* (London), **51**, 3 (1981), 283–90.

This paper presents normative data on the comprehension of kin terms by children, which is then examined in terms of the Piagetian hypothesis that language acquisition is dependent on cognitive development in the child. The order in which kin terms were comprehended followed a definite pattern in terms of the sorts of relationships which were involved, the number of relational components in the terms and the cognitive demands that the comprehension of these relationships made on the child. Terms which described the relationship which others held to the child, child-centred terms, were acquired before terms which described the relationships which the child himself held for others, other-centred terms. These data seem to support the Piagetian position, and particular cognitive operations which appeared to relate causally to the development of kin terms are discussed.

82–482   Okoh, Nduka (U. of Benin, Nigeria). Biculturality and performance in cloze tests of language comprehension: a cross-cultural study. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **2**, 3 (1981), 183–94.

This study investigated the effects of bilingualism on the bilingual child's performance in attainment tests of language comprehension in two contrasting socio-cultural environments (Nigeria and Wales). Measures of language comprehension (using the cloze procedure), 'social-class' background, and home-language environment were applied to two samples of 122 and 167 9–11 year old primary school children in Nigeria and Wales respectively who were selected broadly to reflect a bilingual-monoglot dichotomy in each country.

The results indicated: (1) that in Nigeria, and to a lesser extent also in Wales, bilingual pupils performed better in language comprehension tests when given in their mother-tongue (Yoruba or Welsh) than when given in their 'second' language (English) – although the level of competence in English of these bilingual children in both countries was still relatively high; and (2) that the different socio-cultural backgrounds largely account for the difference in performance in the second language observed between the two countries.

82–483 Presson, Clark C. (Arizona State U.). Understanding sentences in varying contexts. *Journal of Child Language* (Cambridge), **9**, 1 (1982), 217–28.

This study tested Huttenlocher and Weiner's (1971) hypothesis concerning the role of grammatical function in sentence comprehension. Children arranged objects to correspond to descriptions of transitive relations in two tasks. The patterns of object placements provided evidence of how children understood the various sentence forms. Contrary to Huttenlocher and Weiner's hypothesis, grammatical function was not a critical factor in object placements. This was true based on the group data or individual-based analyses. Two factors were important: logical function and order of mention of the items in the sentence. Whether an item was grammatical subject or grammatical object did not affect subjects' choices. The order of mention effects resulted from inattention to sentence meaning prior to the initial choices on certain trials. If the logical relations in a sentence were understood prior to the response, only logical function influenced subjects' responses.

82–484 Rondal, Jean-A. On the nature of linguistic input to language learning children. *International Journal of Psycholinguistics* (The Hague), **8**, 1 (1981), 75–107.

The paper has four main objectives: (1) assessing the actual knowledge of parental speech addressed to language-learning children: (2) reviewing the evidence on the influence of the parental models on child language acquisition; (3) specifying several major implications of this trend of research for a theory of language acquisition; and (4) discussing possible reasons for explaining parental adaptation to the language level of the child and its variation in time. Contrary to certain beliefs, parents do teach language to their children and give special attention to their progress; this teaching and feedback-delivering process has demonstrable effects on language development in the children. The major theoretical implication is that it is necessary to start with the speech the child is exposed to in natural conditions in any attempt to explain language acquisition, as opposed to the usual and exclusive centration in developmental psycholinguistics on the speech of the child with its postulated intrinsic determinants. This position is elaborated upon in the course of the paper and a heuristic is presented for future studies in language acquisition. A multi-factor model is suggested to account for the variation in parental speech addressed to the children.

82–485 Tibbits, Donald F. (Dept. of Speech Pathology and Audiology, Central Missouri State U.). Oral production of linguistically complex sentences with meaning relationships of time. *Journal of Psycholinguistic Research* (New York), **9**, 6 (1980), 545–64.

The aim was to determine the abilities of children to use the adjoining mechanism in combining two constituent sentences with the temporal adjoiners: *after*, *before*, *until*, *when* and *while*. To elicit responses, a sentence repetition task was devised that included these five temporal adjoiners in four different syntactic environments: transitive sentences with the adjoiner and the subordinate clause following the main clause, transitive sentences with the adjoiner and the subordinate clause preceding the

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main clause, intransitive sentences with the adjoiner and the subordinate clause following the main clause, and intransitive sentences with the adjoiner and the subordinate clause preceding the main clase. The 30 were between the ages of 4:0 and 6:6 years.

Certain general conclusions were drawn. Children begin to use the temporal adjoining mechanism early, but they do not master it by the age of 6:6 years. *After*, *before* and *when* appear earlier than *while* and *until*. A rapid period of growth in learning to use the temporal adjoining mechanism occurs between the ages of 4 and 5 years, but a plateau of learning appears to be reached between the ages of 5 and 6 years. In general, children first learn to use the temporal adjoining mechanism in intransitive sentences with the adjoining link in the middle or at the beginning of the utterance, next, in transitive sentences with the adjoining link at the beginning of the utterance, finally, in transitive sentences with the adjoining link in the middle of the utterance. In transitive sentences, children appear to learn the rule for placing the subordinate clause at the beginning of the utterance when temporally adjoining two constituent sentences before they learn the base structure rule. In intransitive sentences, they appear to learn the rule for placing the subordinate clause at the beginning of the utterance when temporally adjoining two constituent sentences at the same time that they learn the base structure rule. The underlying semantic relationships that are expressed by specific temporal adjoiners are important determinants of children's abilities to use these adjoiners. In linguistic evaluations, one should consider the syntactic environment in which the temporal adjoiner occurs and assume that *after*, *before* and *when* are developmentally earlier than *while* and *until*.

82–486   Vihman, Marilyn May (Stanford U.). Phonology and the development of the lexicon: evidence from children's errors. *Journal of Child Language* (Cambridge), **8**, 2 (1981), 239–64.

Various kinds of children's lexical errors, mostly based on similarity in sound, are presented and classified. At the earliest stage some children are found to pursue a homonym strategy, actively seeking to combine adult word-patterns to limit their output repertoire. The associations between words underlying these productive homonyms, together with perception-based errors, blends, and other word-substitutions, are compared with malapropisms from a slightly older group of children as well as with data from adults. Analysis of these data makes it possible to chart developmental changes in the phonological links which form one substructure of the lexicon.

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82–487   Beattie, Geoffrey W. Interruption in conversational interaction, and its relation to the sex and status of the interactants. *Linguistics* (The Hague), **19**, 1/2 (1981), 15–35.

This study investigated interruptions in one type of natural conversational interaction university tutorials. It sought to determine how frequency and type of interruption

varies with the sex and status of interactants. The study found no sex differences in either the frequency or type of interruption used, contrary to the findings of some previous research. Status appeared, however, to have a significant effect. In terms of overall frequency of interruption, the high status individuals in these groups – tutors in university tutorial groups – were interrupted significantly more frequently than they themselves interrupted. Tutors were, however, found to use a significantly higher proportion of that specific type of interruption which has in the past been shown to correlate with ratings of 'dominance' than students. The findings of the study have implications for studies of social interaction which attempt to employ the concept of interruption as a measure of 'power' or 'dominance'.

82–488   Benjamin, Gail R. Interactional uses of tone of voice in the United States and Japan. *Semiotica* (The Hague), **35**, 1/2 (1981), 71–92.

The results are presented of a replication in the USA of an experiment conducted earlier by the author in Japan, to compare the role of tone of voice in the two language communities. In both studies, although subjects could not accurately ascribe ages to the two speakers in the taped conversation they listened to, they showed strong consensus on the relative ages of the participants. However, subjects were not always correct in this consensus, and when they were not, the fact must be accountable in terms of the social (i.e. not merely chronological) constitution and connotations of age and relative age. More generally, it is argued that the roles of tone of voice in American English are to clarify or modify the interpretation of linguistic material and as a resource for the mangement of interactions and relationships. Japanese tone of voice has a role complementary to that of the honorific system, but cannot be regarded simply as another option within that system, since it specifically discriminates individuated from category relationships, a distinction that has no direct reflex in the honorific system. In both English and Japanese, tone of voice information is integrated with the information from linguistic options and may modify, reinforce or add to the contribution to meaning made by those options.

82–489   Hjelmquist, Erland. Discourse processes in dyadic communication. *Journal of Pragmatics* (Amsterdam), **6**, 1 (1982), 25–38.

This article reviews and discusses the principal approaches of the behavourial sciences to the production and understanding of discourse, especially that of spoken discourse. Within psychology, models for discourse processes have been mainly developed by memory researchers. Futhermore, empirical research has focused on written text, even though the models sometimes are claimed to be relevant for spoken discourse as well. This claim is misleading; in particular, it runs the risk of contributing to a neglect of the characteristics of spoken discourse.

Nearly the opposite approach is represented by the ethnomethodological study of conversation within sociology. Here we find extreme attention to the data itself (consisting mostly of transcriptions of taped conversations). The implicit purpose is to explain the flow of conversations in terms of structural relations between utterances, while the intentional aspects of spoken discourse are ignored. This has been shown to create serious descriptional and explanatory problems.

Labov and Fanshel's approach (1977), which is closely related to the sociological paradigm, is discussed. Although this model explicitly takes intentions and motives into account, its explanatory power seems limited. The general conclusion is that a theory of the relation between thought and language should be a central component in a theory of spoken discourse. Some suggestions for the development of such a theory are given.

82–490   Longacre, Robert E. A spectrum and profile approach to discourse analysis. *Text* (The Hague), **1**, 4 (1981), 337–59.

A text needs to be approached in terms of the situation (physical setting or social/intellectual milieu) in which it is composed, in terms of the addressee-interpreter's contribution to the understanding of the text (schemata, scripts and referential frames), and in terms of the text itself. The latter complex of considerations certainly includes at least the macrostructure (germinal idea or overall conception), constituency (embedded discourses, paragraphs, and sentences), and texture. This paper develops the third concern under the twin rubrics Spectrum and Profile, which both have to do with the complementary concerns of cohesion and prominence in discourse structure; spectrum has to do largely with continuing strands of information which at once unite a discourse and distinguish hierarchically the types of information within it; profile has to do with the linguistic reflexes of mounting and declining tension (or excitement) within a discourse.

82–491   Osokin, V. V. (Tomsk). Формы общения: взаимодействие и переходностъ. [Modes of speech: their interaction and transferability.] *Русский язык за рубежом* (Moscow), **4** (1981), 59–61.

The particular characteristics of monologue and dialogue, or polylogue, may be carried over from one to the other, usually for deliberate stylistic reasons, as in literature. However, journalism and broadcasting have led to the development of new hybrid forms, especially where topics for discussion or question and answer are prepared in advance. Formal meetings, for example between diplomats, also lead to the transfer of forms from monologue to dialogue or polylogue.

82–492   Pike, Kenneth L. Nonsense in the service of sense. *Language and Communication* (Oxford), **1**, 2/3 (1981), 179–88.

A nonsensical sample text is subjected to a detailed tagmemic analysis with a view to attaining a deeper understanding of the need for a complex of interlocking communication concepts. Matters pertaining to grammar, phonology and referential structure and the ways in which these inter-relate are discussed. [There are many examples of points made in reference to specific items in the text.]

82–493   Price-Williams, Douglass and Sabsay, Sharon (U. of California at Los Angeles). Communicative competence among severely retarded persons. *Semiotica* (The Hague), **26**, 1/2 (1979), 35–63.

Nine Down's syndrome individuals were recorded in conversation in natural settings, to ascertain whether, despite severe linguistic and cognitive impairment, they actually

talk to one another; what their conversation is like, and what they talk about. The syndrome is a developmental disorder in which cognitive and physical development follow the normal pattern but at a much slower rate. Language is apparently the area of greatest developmental retardation, speech being particularly affected.

Spontaneous and elicited conversations were audio- and video-taped between members of the group and between members of the group and researchers or hospital staff. Conversations ranged from a test-like interview to casual encounters. Transcriptions of the tapes were then made. It was found that there was a great deal of communication, both verbal and non-verbal, and it was more complex than previous clinical studies would suggest. The communication is subject to the same requirements and follows some of the same basic patterns as that of normally competent adults and children; the communicative strategies used are more like those used by young children just acquiring language, but the use of these strategies is occasioned less by communicative or cognitive incompetence than by the communicative distress arising from linguistic impairment. In some ways the conversation of these individuals is more sophisticated than that of children, in others more simple or disordered. Nevertheless most of their interactions, even if routinised or fragmentary, must be judged successful communicative events.

82–494 van Eemeren, F. H. (Inst. voor Neerlandistiek, Amsterdam) **and Grootendorst, R.** The speech acts of arguing and convincing in externalised discussions. *Journal of Pragmatics* (Amsterdam), **6**, 1 (1982), 1–24.

In discussions directed towards solving a conflict of opinion, the participants try to convince one another of the acceptability or unacceptability of the opinion that is under discussion. If the participants are co-operative, this means that they are prepared to externalise their position with regard to the opinion and to advance argumentation for or against it. In the way in which it was originally conceived, the speech act theory is inadequate to characterise argumentation. This objection can be met by regarding argumentation as an illocutionary act complex at a textual level. The authors formulate the conditions obtaining for a happy performance of this act complex and explain that for the speaker the performance is linked by convention to the perlocutionary act of convincing. In the case of an externalised discussion this means that with his argumentation the speaker tries to make the listener, in turn, perform an illocutionary act in which he expresses his acceptance or non-acceptance of the opinion.