Research in the supporting sciences

LINGUISTIC THEORY

86–94   Davison, Alice (U. of Illinois). Syntactic markedness and the definition of sentence topic. *Language* (Baltimore, Md), **60**, 4 (1984), 797–846.

Sentence topics are linguistic constituents, with syntactic and semantic properties which single them out for a linking function in the process of relating a sentence to its discourse context. This paper explores the relation between the linguistic properties of sentence topics and their use as discourse links in sentence processing. It proposes a set of criteria for distinguishing relatively weak or strong topic NP's based on syntactic and semantic/pragmatic properties. Syntactically defined topics include subjects and those in 'marked' NP positions, where the surface features define grammatical function in an ambiguous or indirect way. Implications of this proposal are drawn for several languages, and for various models of language processing.

86–95   Hopper, Paul J. (State U. of New York, Binghamton). **and Thompson, Sandra A.** (U. of California, Los Angeles). The discourse basis for lexical categories in universal grammar. *Language* (Baltimore, Md), **60**, 4 (1984), 703–52.

Most linguists who have investigated linguistic categories from a universal viewpoint have accepted the existence of two basic parts of speech, NOUN and VERB. Other categories are found to be only inconsistently represented; thus ADJECTIVE is manifested in many languages as a class of stative verb. Furthermore, individual languages often have intermediate categories such as GERUND, which cannot be unambiguously assigned to a single category. It is suggested here that the basic categories N and V are to be viewed as universal lexicalisations of the prototypical discourse functions of 'discourse-manipulable participant' and 'reported event', respectively. The grammars of languages tend to label the categories N and V with morpho-syntactic markers which are iconically characteristic of these categories to the degree that a given instance of N or V approaches its prototypical function. In other words, the closer a form is to signaling this prime function, the more the language tends to recognise its function through morphemes typical of the category – e.g. deictic markers for N, tense markers for V. Categoriality itself is another fundamental property of grammars which may be directly derived from discourse function.

86–96   Wierzbicka, Anna. Cups and mugs: lexicography and conceptual analysis. *Australian Journal of Linguistics* (St Lucia, Australia), **4** (1984), 205–55.

To state the meaning of a word one must study the structure of the concept which underlies and explains its applicability to things. This means describing fully and accurately the IDEA of a typical representative of the kind. To do this fully we have to discover the internal logic of the concept through methodical introspection, not

3   LTA 19

through interviews or laboratory experiment. A detailed discussion of the words *cup* and *mug* give an indication of how words should be defined. Definitions are in two parts: what people imagining these things (*a*) would say about them and (*b*) could say about them. Reference is made to their purpose, the material they are made of and their appearance. Inevitably these definitions are long but they avoid circularity through observations of the principle of reductive analysis, which states that a concept must be defined via simpler, not via more or equally complex concepts.

PHONETICS AND PHONOLOGY

86–97 Berkovits, Rochele (Tel Aviv U.). A perceptual study of sentence-final intonation. *Language and Speech* (Hampton Hill, Middx), **27**, 4 (1984), 291–308.

The relationship between syntactic and prosodic cues to sentence boundaries was examined as a function of language dominance. Groups of English-dominant and Hebrew-dominant subjects were timed on their responses to tones at the ends of complete and incomplete sentences in both languages, and they identified each utterance as either 'finished' or 'unfinished.' The truncated sentences were lexically and syntactically well-formed, though prosodically incomplete. Reaction time was also measured in a second experiment, in which explicit attention was not called to intonation. The results indicated that listeners perceive acoustic cues to sentence boundaries, though the tendency to reprocess these cues in terms of syntax increases as less attention is directed to prosodic features. In Experiment II, both the subjects who were aware of the unfinished intonation and those who reported noticing nothing unusual about the sentences responded significantly more slowly to incomplete utterances. These findings indicate that post-sentence identification tasks may fail to detect that objective acoustic information is in fact initially perceived. The two dominance groups responded similarly to the same stimuli in Experiment I, producing no errors in identifying unfinished sentences in English and the largest number of incorrect responses on unfinished sentences in Hebrew. These results provide support for perceptual effects of differences in segmental lengthening between English and Hebrew uncovered in an earlier study.

86–98 Coberly, Mary Schramm and Healy, Alice F. (U. of Colorado, Boulder). Accessibility of place and manner features and the place/manner dissimilation principle in a learning task. *Language and Speech* (Hampton Hill, Middx), **27**, 4 (1984), 309–21.

Alveolar, labial, fricative, and stop features were not readily accessible to adult subjects in a concept-formation task that involved learning a linguistic suffixing rule, even though the alveolar stop category triggers an alternate form of the English past tense suffix. However, the place/manner dissimilation principle was accessed toward the end of the testing session, suggesting that subjects encountered it as an articulatory constraint, as a result of pronouncing stimuli throughout the experiment. Speakers may process the past tense and plural suffixing rules in terms of articulatory constraints

(i.e. possible and impossible pronunciation sequences), rather than in terms of segment or feature categories.

86–99   Harmegnies, B. and Landercy, A. (U. of Mons-Hainault). Language features in the long-term average spectrum. *Revue de Phonétique Appliquée* (Mons, Belgium), **73/5** (1985), 69–79.

Differences between both the languages (Dutch and French) of bilingual subjects were studied. Their voices were recorded uttering short balanced texts, and the recording analysed with a spectrum analyser which computed the long-term average spectrum for each utterance. Two average spectra were then computed for each student, one the mean of 10 French utterances, the other the mean of 10 Dutch utterances. For each group and each language, the average spectra thus obtained were, in turn, averaged across subjects to obtain four final average spectra. Difference curves between these spectra were plotted, and showed slight but invariant differences, probably arising from different phoneme distribution in the two languages, the main difference being the existence of nasal vowels in French. The use of bilingual subjects, who probably tend to neutralise their way of speaking, would tend to minimise the differences.

86–100   Hieke, A. E. (U. of Bayreuth). Linking as a marker of fluent speech. *Language and Speech* (Hampton Hill, Middx), **27**, 4 (1984), 343–54.

A two-dimensional, speech dynamic analysis of natural speech identifies linking (liaison) as a prominent class of phenomena at the phonetic syllabic level. Consonant Attraction, the specific feature under experimental observation, is highly prevalent in casual English speech both in terms of absolute frequency and in a ratio of potential to actualised link points. A statistically significant difference between native and nonnative speech can be noted for this fluency phenomenon. It points to the role this and related processes can potentially play in a taxonomy of the oral language and suggests the use of this feature as one of the parameters of fluent speech, valuable particularly in second-language proficiency assessment. There are strong indicators that the degree of alteration due to this and similar processes of absorption in phonated speech has significant repercussions on canonical shape in English.

86–101   Keating, Patricia. Linguistic and nonlinguistic effects on the perception of vowel duration. *UCLA Working Papers in Phonetics* (Los Angeles, Calif), **60** (1985), 20–39.

A comparison of how Czech and American listeners label stimuli differing in vowel duration shows both linguistic and nonlinguistic effects on perception. The linguistic effect is that discreteness of labelling categories differs across the two languages. This difference suggests that the 'phonemes' of the 'phoneme boundary effect' may be underlying lexical phonemes, rather than derived surface phonemes. The nonlinguistic effect is that the location of the category boundary for both sets of listeners judging Czech stimuli is the same. This similarity suggests that vowel duration contrasts may have an inherent, auditory basis.

3-2

86–102   Lisker, Leigh. (U. of Pennsylvania and Haskins Laboratories). How is the aspiration of English /p, t, k/ 'predictable'? *Language and Speech* (Hampton Hill, Middx), **27**, 4 (1984), 391–4.

Aspiration as a phonetic property of the English stop categories is usually said to be non-distinctive on the ground that its occurrence can be accounted for by context-sensitive rules. The word-pair *pin–spin* is often cited by way of example. The word-initial voiceless stop is aspirated; the post-/s/ voiceless stop is not. But the presence of aspiration is 'predicted' only for some voiceless stops – namely those that are 'spelled' phonologically /p/ and are either word-initial or in a position where the next vowel is stressed and in the same word. Initial stops that are spelled /b/, as in *bin*, may also be voiceless, so that a rule which predicts aspiration from the voicelessness of an initial stop will not work, since *bin* is never aspirated. Thus the knowledge on which the prediction is based is not the voicelessness of the stop, or indeed on any other ascertainable phonetic property. We know that in some words voiceless initial stops can be freely replaced by voiced stops without semantic effect, and that those voiceless stops are never aspirated, while in other words there are initial voiceless stops that are regularly aspirated, and cannot be freely replaced by voiced stops. In other words, we know whether a voiceless stop is to be aspirated or not if we know how it is spelled phonologically.

86–103   Westbury, John R. (U. of N. Carolina) **and Keating, Patricia A.** On the naturalness of stop consonant voicing. *UCLA Working Papers in Phonetics* (Los Angeles, Cal), **60** (1985), 1–19.

What is it about the content of particular phonetic features that causes them to be 'marked' or not (according to the theories or Trubetzkoy, Jakobson and Chomsky & Halle)? The notion of naturalness evoked in recent literature lacks suitable models to explain 'naturalness'. Is it more natural for stops to be voiced or voiceless? Are voiced stops not inherently more difficult? An aerodynamic model is presented which permits the ease of articulation of consonants to be assessed in different phonetic contexts. Voiceless initial and final stops, voiced intervocalic stops and voiced-voiceless intervocalic stop clusters are expected to be relatively easier to produce than others. Comparison with real language data shows that predictions for singleton consonants are confirmed in the pre-contrast stages of children's speech. For adult speech, however, other factors than ease of articulation appear to have a part to play, in that in languages with no stop consonant voicing contrast, stops tend to remain voiceless in all environments. In languages with a voicing contrast, predictions for initial and final positions are largely confirmed, while for medial positions no strong preference as to voicing is shown.

SOCIOLINGUISTICS

86–104 Davies, Alan (U. of Edinburgh). Standard and dialect English: the unacknowledged idealisation of sociolinguistics. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **6**, 2 (1985), 183–92.

Sociolinguistic contributions to the recent debate on the choice of language code for educational purposes in British schools are queried on two grounds: first, because the evaluation requirement of sociolinguistics is insufficiently observed, and second because too little attention is given to the necessity for sociolinguistics to idealise, in this case to idealise non standard language use towards standard forms. An attempt is made to reconcile the conflicting normative and permissive demands. The two protagonists in the debate to whom reference is made are Peter Trudgill and John Honey.

86–105   Dolson, David P. (California State Dept. of Ed., Sacramento, CA). The effects of Spanish home language use on the scholastic performance of Hispanic pupils. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **6**, 2 (1985), 135–55.

This study looked at the home language use patterns of Hispanic families in an urban setting to determine the differences between academic achievement, language development, and psychosocial adjustment of children whose families have maintained Spanish as the main home language (additive bilingual home environment) and children who come from homes where a switch to English has occurred (subtractive bilingual home environment).

For this study, 108 subjects were selected based on their ability to meet criteria established to control for (*a*) initial home language, (*b*) length of enrolment in school, and (*c*) socio-economic status. All the subjects were enrolled in the fifth or sixth grade at a large East Los Angeles elementary school during the 1982–83 year.

A series of independent *t* tests was used to compare the two groups of primary interest on school measures of academic achievement (English reading proficiency, mathematics, Spanish reading vocabulary, and academic grade point average), language development (oral English proficiency and number of school months that individual students were classified as limited in English), and psychosocial adjustment (attendance, disciplinary referrals, effort grade point average, and grade level retention).

In this study students from additive bilingual home contexts significantly ($P < 0.05$) outperformed students from the subtractive group on five of ten scholastic measures. Regarding the remaining five variables, no statistically significant differences between the two groups were found. For each of these five variables, the group mean for students from Spanish-speaking homes was higher than the corresponding group mean for students from homes where English had replaced Spanish. Although not statistically significant, the differences on these variables were pronounced and always in the same direction.

The overall assumption of many educators that Hispanic students from Spanish language homes do less well in school than Hispanic students from primarily

English-speaking homes is challenged by the results of this study. The direction of the difference in each of ten scholastic variables indicates that students from additive bilingual home situations have conspicuous advantages when compared to counterparts from subtractive bilingual homes.

86–106   Grimes, Barbara F. (Summer Inst. of Linguistics, Dallas, TX). Comprehension and language attitudes in relation to language choice for literature and education in pre-literate societies. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **6**, 2 (1985), 165–81.

In multilingual and multidialectal societies, the degree of comprehension of a message by the hearer should be the primary consideration in choosing which language or dialect to use for adequate communication in literature and education. Functional participation in society requires adequate comprehension of abstract concepts. That requires near native-speaker proficiency: at least Level 4 as measured on the U.S. Foreign Service Institute scale. If a significant number of speakers in a language group are not at that level in a second language, communication needs to be channeled through their first language.

Attitudes toward one's own or a second language in some cases are negative to the point of hindering acceptance of literature or the concepts it presents. Such a hindering attitude toward a second language, even if it is adequately understood, indicates the need for literature in the first language. A hindering attitude toward the first language when the second language is not adequately understood, on the other hand, indicates the need for promotion of the first language as an acceptable vehicle for literature and education.

86–107   Grosjean, François (Northeastern U., Boston). Quelques réflexions sur le biculturalisme. [Some reflections on biculturalism.] *BULAG* (Besancon), **11** (1984), 86–97.

A bicultural individual is defined as one who: (*a*) participates regularly in the life of two cultures and (*b*) can adapt, at least partially, behaviour, attitudes and (where relevant) language to the cultural environment and (*c*) combines traits of both cultures; in practice, some of these cannot be suppressed as in (*b*), so biculturals cannot switch cultures as completely as bilinguals can switch languages.

Biculturals are often rejected by both parent cultures and suffer identity crises. The best solution, to assert a new identity, is available to large groups like the Chicanos ('We are neither wholly Mexican nor wholly American'), but not to isolated biculturals. The central problem is society's refusal to accept that one can belong to two major cultures: one can be railwayman and father, socialist and Catholic, Parisian and Breton, so why not French and English?

86–108 Haarmann, Harald (Hitotsubashi U.). The role of ethnocultural stereo-types and foreign languages in Japanese commercials. *International Journal of the Sociology of Language* (Amsterdam), **50** (1984), 101–21.

While ethnic stereotyping is universal and a fundamental component of advertising commercials, in Japan the proportion and importance of foreigner stereotypes is much greater than elsewhere and has a linguistic dimension, inasmuch as snippets of foreign languages are included in TV and other media commercials to a much greater extent than there are foreign borrowings in colloquial Japanese. Thus certain products become strongly associated with certain languages and certain ethnic images, usually implying prestige and cosmopolitan sophistication. Japanese language in the mass media has to be considered a different variety from colloquial Japanese. [Examples are given, the relations tabulated and the domain of the two varieties of Japanese illustrated.]

86–109 Landry, Rodrigue and Allard, Réal. Choix de langue d'enseignement: une analyse chez des parents francophones en milien bilingue soustractif. [Choice of language of instruction: a survey of francophone parents in a subtractive bilingual setting.] *Canadian Modern Language Review* (Toronto), **41**, 3 (1985), 480–500.

This article presents the results of a survey of two groups of francophone parents in Moncton, New Brunswick. Parents in the first group (L1 parents) had enrolled their children in the area's French schools while parents in the second group (L2 parents) had enrolled their children in the English schools. The reasons invoked by L1 parents and L2 parents for having chosen to enrol their children in maternal language and second-language schools respectively, are analysed in this article. L1 parents and L2 parents were also compared on the following variables: perceived advantages and disadvantages of their choice of language of instruction for the children, their degree of satisfaction with their choice of language of instruction, their perception of the linguistic competence and ethnic identity of their children, the extent of their own linguistic assimilation, the variety of language spoken in the home, a developmental profile of their use of a second language and their perception of the ethnolinguistic vitality of the francophone community in the area. The analyses show that immersion in a second-language school contributes to linguistic assimilation of members of an ethnic minority.

86–110 Okamura-Bichard, Fumiko. Mother tongue maintenance and second language learning: a case of Japanese children. *Language Learning* (Ann Arbor, Mich), **35**, 1 (1985), 63–89.

This paper reports the findings of a study conducted with Japanese children temporarily residing in the U.S. The study examined, within a population whose group-specific background was fairly definable, the degree of mother tongue main-tenance/development in relation to the learning of the second language among the subjects as well as the factors which affected the individuals' success or failure in their endeavors in the learning of two languages.

Forty-eight subjects, who were sixth graders in a Japanese weekend school, took a nonverbal IQ test and a Japanese language test. Some of them also took a reading test in English. Both the children and parents responded to individual questionaires. Correlation, factor, multiple regression, and discriminant analyses were the methods of analyses used.

The results revealed that there were no relationships between (1) the years of schooling in Japan and the level in the Japanese language skills, (2) the level of intelligence and the abilities in the two languages, and (3) the comparable abilities in Japanese and English. The years of schooling in the U.S. significantly related to the skill level in English. This factor did not have any discriminating power, however, to separate the children who were high in both languages, high in one and low in the other, and low in both languages. Parents proved a factor in the children's language status, particularly in the degree of their mother tongue maintenance. In terms of relative importance, however, the children's interests, attitudes, and the extent of use of the language contributed more significantly to the level in each language.

86–111   Rey, Micheline. Des cribles phonologiques aux cribles culturels: vers une communication interculturelle. [From phonological to cultural filters: towards intercultural communication.] *Bulletin CILA* (Neuchâtel), **39** (1984), 44–84.

Trubetzkoy's concept of phonological filters is extended to filters of a linguistic and cultural kind imposed by restrictive labels applied to linguistic situations. For example, in Suisse Romande French may be seen as a first language, mother tongue or host language, according to the institution. 'First language' underlines the political and educational reality. For French speakers, some school children will have a foreign language as their mother or native language or a vernacular (Alemanic and Italian dialect) or a second language of their native country or a language used for professional purposes (English). French too can be mother tongue or foreign language or host language, according to the communicative event. A plea is made for a wider, 'global' approach to the rich phenomena of language in the community by schools and teachers. A wide range of examples (phonological, lexical, syntactic and conversational) is given to show how school children can be enriched by the linguistic wealth that surrounds them and how minority groups can have their status enhanced.

86–112   Romaine, Suzanne. Relative clauses in child language, pidgins and creoles. *Australian Journal of Linguistics* (St. Lucia, Australia), **4** (1984), 257–81.

Once we recognise that a key part of the semantic – pragmatic function of a relative clause is the assignment of a referent to an empty NP slot, we can then identify some common developmental principles which govern the process of relativisation in child language, pidgins and creoles. For instance, the route to fully syntacticised relativisation in Hawaiian English Creole can be illustrated in the following three sentences: (1) *You fain Hawaiians* [*ϕ spik English*] 'You found Hawaiians who could speak English' [zero strategy]. (2) *Sam* [*dei drink*] *meik chabrol* 'Some who drink make trouble' [personal pronoun strategy]. (3) *Evri filipino* [*hu kud aford it*] *bai wan* 'Every Filippino who could afford it bought one' [English relative pronoun]. A similar progression can be traced

in children's acquisition of relative clauses. Other examples drawn from data cited by a number of other authors are discussed.

86–113 Sutcliffe, David (Bulmershe Coll. of H.E.). Investigating the language use of a British Black Community: an initial report. *York Papers in Linguistics* (York), **11** (1984), 311–21.

The language of speakers of Afro-Caribbean origin in Dudley, West Midlands, England, was studied by means of a five-part interview, involving black and white interviewers, formal and informal contexts, and one section when the subject groups were left alone. Choice of language variety reflected not only these variables but also factors such as mimicry, anger, boasting, and banter, and it was possible to relate these to use of Jamaican Creole in an implicational table.

The situation in Dudley is not accurately described as post-Creole continuum since basilectal Jamaican speech is a reality. A bidialectal/bilingual model may be truer. Black speakers have developed some characteristic modifications of the local dialect, but maintain two separate systems, of which the intonational level characterises the discreteness, the lexical level the unity. The data support Labov's recent claims for a deeper stability underlying language change.

86–114 Tannen, Deborah (Georgetown U., Washington). The pragmatics of cross-cultural communication. *Applied Linguistics* (Oxford), **5**, 3 (1984), 189–95.

Almost every aspect of communication is culturally relative, and eight kinds of difference are exemplified in this paper. Cultures differ in when it is deemed appropriate to talk and keep silent, in what kinds of talk are allowed (if one can ask questions, for example), in pacing and pausing, in signals to show one is listening, in the meaning of intonation patterns, and in the use of formulaic utterances. Communication in any culture is a matter of indirectness, but how to be indirect is culturally relative, so that 'small talk' for example is eschewed by American businessmen but essential for others. Forms of cohesion and coherence also differ – argumentation in Arabic is by accretion and repetition, which seem pointless to Americans.

The typical result of these differences is negative cross-cultural stereotyping. For example, as Finns talk less than Swedes, the former are seen as un-cooperative and stupid, the latter as pushy, hypocritical and untrustworthy.

86–115 Terestyéni, T. The knowledge of foreign languages in Hungary. *Acta Linguistica* (Budapest), **31**, 1/4 (1981), 299–311.

Data were collected (by means of questionnaires) as to the spread of foreign language communication, the linguistic-ethnic composition of the population, changes in foreign-language learning, and the effectiveness of language teaching in Hungary. Two surveys were carried out, in 1979 and 1980, both based on samples of 10,000 adults. Results differed only marginally. The languages asked about were German, English, French and Russian. Rumanian, Slovac and South Slavic languages were classified as separate categories, as was Gypsy and 'other languages'.

German was the best-known language (7·8 %), followed by Russian (3 %), English (1·9 %), then French (0·8 %). German is the language of an important national minority, as are Slovak (1·4 %), South Slavic languages (0·8 %) and Rumanian (0·6 %). More than one third of those knowing foreign languages are native speakers of them, mainly fluent bilinguals. Secondary education is the main source of knowledge of the other 'Western' languages. Russian is compulsory in the Hungarian education system. As the older generation die out, speakers of a foreign language as their mother tongue are decreasing. The number of non-native speakers is growing among the younger age-group. In future, it is likely that the number of those knowing English and especially Russian will grow and those knowing German will stagnate or decrease. The role of television programmes is examined. More than a quarter of adult viewers watch regularly of occasionally foreign programmes in the language they know.

PSYCHOLINGUISTICS

86–116   Eisenberg, Ann R. (U. of Texas, San Antonio). Learning to describe past experiences in conversation. *Discourse Processes* (Norwood, NJ), **8**, 2 (1985), 177–204.

The early development of the ability to discuss past experiences in conversation is examined. The data consist of 186 conversations about past events between two Spanish-speaking girls (21–31 and 24–38 months) and their families. Each description is analysed in terms of its length, the familiarity and specificity of the event described, the truth of the statements, the reason for mention, the use of grammatical forms, and the role of an adult in intiating and maintaining the conversation. Based on these analyses, three phases of development are identified, characterised by: (*a*) dependency on adult participation; (*b*) the discussion of elements common to many instances of an event, rather than the unique occurrences of a specific event (i.e. dependence on a 'script' of the event); and (*c*) talk about unique occurrences, but difficulty in planning a lengthy discourse. The results are discussed in terms of children's knowledge of event structures and the early organisation of their memories.

86–117   Grosjean, François (Northeastern U., Boston). Le bilinguisme: vivre avec deux langues. [Bilingualism: living with two languages.] *BULAG* (Besançon), **11** (1984), 4–25.

A bilingual is someone who uses two languages in daily life and not that mythical being with equal and perfect command of both. The use bilinguals make of their languages varies according to the situation in which they find themselves. In the rare cases where his or her need for both languages is equal, a bilingual is described as balanced; more commonly one or other language is dominant. The stable bilingual (one who is no longer at the stage of acquiring a language) enjoys the same communicative competence as a monolingual. Bilingualism has too long been studied from the point of view of the monolingual, as if the latter were the norm. In many parts of the world, for example in Africa, it is multilingualism which is the norm. Claims for the effects of bilingualism

on the cognitive development of children are for the most part unsubstantiated and the so-called advantages and disadvantages of bilingualism arise from economic, social, cultural of educational factors.

86–118   Hsu, Jennifer Ryan (William Paterson Coll. of New Jersey) **and others**. The development of grammars underlying children's interpretation of complex sentences. *Cognition* (Lausanne), **20**, 1 (1985), 25–48.

Children's knowledge of the structure of multiple clause sentences and the rules governing control of missing complement subjects (PRO) can be described in terms of four grammar types which constitute separate developmental stages: subject oriented, object oriented, mixed subject-object, and approaching adult. These grammar types are believed to develop following an initial stage when children rely on a strategy to interpret multiple clause sentences. In order to test this hypothesis, 64 children ranging from 3;2 to 8;3 years of age were interviewed on four separate occasions. During the first interview a spontaneous language sample was collected and a Developmental Sentence Score (DSS), a measure of grammatical development, was obtained for each child. During the second and third interviews each child was asked to act out a total of 45 complex sentences. Fifty of the children returned for a fourth interview which included an acting out task and a judgement task. The five stages were associated, a priori, with specific patterns of control and the children were classified according to either grammar type or use of the initial strategy on the basis of their response patterns to a selected set of the 45 experimental constructions. The hypothesis of the four grammar types and their sequential development was supported by the fact that the children belonging to each grammar type differed significantly with respect to age and DSS scores. Furthermore, all the means were sequentially ordered in the predicted direction. Tests involving the relationship of grammar type to (1) reliability of response patterns across interviews, and (2) ability to identify semantically deviant sentences provided independent support for the theory of the four grammar types. There was only limited support for the existence of the initial stage.

86–119   Klee, Thomas and Fitzgerald, Martha Deitz (Vanderbilt U. Sch. of Medicine). The relation between grammatical development and mean length of utterance in morphemes. *Journal of Child Language* (Cambridge), **12**, 2 (1985), 251–69.

A widely held practice in many studies of child language development and disorders has been to employ an easily calculated numerical metric, mean length of utterance measured in morphemes (MLU), as a 'general index of grammatical development'. While this practice seems to have found acceptance among many students of child language, the usefulness of MLU past Stage II has been assumed but never empirically tested. This study evaluated the grammatical performance and MLU of 18 normally developing 2- and 3-year-old children and found that MLU did not correlate significantly with age ($r = 0.26$), nor did it discriminate children's profiles of grammatical development.

86–120   Koskas, Eliane. Bilinguisme et didactique des langues: approche neuropsycholinguistique. [A neurolinguistic approach to bilingualism and language teaching.] *LINX* (Paris), **11** (1984), 49–76.

The results of neurolinguistic and psycholinguistic research can contribute to our understanding of how language is acquired. In cases of precocious bilingualism when two languages are acquired simultaneously, the second language is learned in the same way as the mother tongue. It is only with growing physical maturity from the age of three onwards that the child becomes aware of operating two systems. In cases of non-simultaneous language acquisition in children of 6 to 8 years, the second language is acquired in a fashion which parallels the way the first was learned. The distinction commonly made between compound bilingualism (two languages constituting a single system) and co-ordinate bilingualism (two independent systems) seems to rest on no very secure foundation. However, there are grounds for believing that perception is more likely to compound and production co-ordinate.

Research results often appear contradictory. The teacher should be aware there is no infallible recipe for teaching languages. Different personality types learn in different ways; different aspects of language are acquired differently. The communicative situation and the learner's own individual circumstances should always be taken into account.

86–121   Masny, Diana and d'Anglejan, Alison. Language, cognition, and second language grammaticality judgments. *Journal of Psycholinguistic Research* (New York), **14**, 2 (1985), 175–97.

In first language research, there appear to be two predominant positions relating metalinguistic awareness to language development. One suggests that since metalinguistic awareness is related to primary language acquisition (comprehension and production), general cognitive process perform a limited role in metalinguistic awareness. The other suggests that since metalinguistic awareness is more closely related to secondary language acquisition (reading and writing), a greater role is assumed by general cognitive processes. There have been some indirect attempts to study the role of language and cognition with respect to second language grammaticality judgments. There is growing evidence that metalinguistic awareness is a reliable indicator of developing second language competence. Furthermore, it has been shown that language aptitude is significantly related to metalinguistic awareness. The present study was designed to investigate the statistical relationship between second language grammaticality judgments and selected cognitive and linguistic variables. The variables studied were second language proficiency, second language classromm achievement, first language reading competence, language aptitude, nonverbal intelligence, field dependence-independence, and a written grammaticality judgement test tapping the ability to recognise, and correct, deviance. Subjects were college students in advanced English-as-a-second-language classes. Multivariate statistical techniques were used to determine the relative contribution of linguistic and cognitive variables to the individual variation demonstrated by the learners in their ability to detect deviance in English. The results showed that second language proficiency, second language

achievement in the classroom, and language aptitude were significantly predictors of the subjects' ability to make grammaticality judgments. First language reading competence was significantly related to subjects' ability to correct deviance. These observations are discussed in the light of: (1) The relationship between cognition, language and metalinguistic awareness and (2) the role of metalinguistic awareness in second language acquisition and second language learning.

86–122   Moerk, Ernst L. (California State U., Fresno). Analytic, synthetic, abstracting, and word-class-defining aspects of verbal mother-child interactions. *Journal of Psycholinguistic Research* (New York, **14**, 3 (1985), 263–87.

Phenomena of language teaching and learning in the course of verbal interactions between one mother and her daughter were analysed. The daughter was between 18 and 27 months old during the recordings, and her utterance length ranged from 1,5 to 4,0 morphemes. Twenty hours of interactions were analysed and the emphasis was placed upon sequential aspects and mathemagenic features of the conversations. It was demonstrated that the mother performs much analytic, synthetic, abstracting, and word-class-defining work during these verbal interactions. These maternal instructional activities seem to lead not only to the child's learning of language rules but also to her employment of the abstracting, analytical, and synthetic methodology. It is concluded that the main explanatory focus has to be on the mother in the attempts to explain language transmission and acquisition. Basic similarities to other instructional/skill training situations are suggested. Neither extraordinary complex cognitive nor innate linguistic capacities need to be assumed to explain the phenomena in question.

86–123   Vihman, Marilyn May (Stanford U.). Language differentiation by the bilingual infant. *Journal of Child Language* (Cambridge), **12**, 2 (1985), 297–324.

This paper traces the process involved in the bilingual infant's gradual differentiation of his two languages, beginning with the acquisition of a dual lexicon. Word combination is at first based indiscriminately on this dual language source; function words account for a disproportionately large number of tokens used in mixed-language utterances. Universal principles of child syntax are at first applied; later, rules specific to each of the languages are developed separately. The development of self-awareness and sensitivity to standards in the second year provides the essential cognitive underpinning for the child to begin to avoid mixed-language utterances and to choose his language according to his interlocutor. At a still later point the bilingual older child may begin to make use of code-switching strategies appropriate to his or her bilingual community.

86–124   Vihman, Marilyn May and others (Stanford U.). From babbling to speech: a re-assessment of the continuity issue. *Language* (Baltimore, Md), **61**, 2 (1985), 397–445.

Controversy exists over whether there is any connection between children's babbling and the development of the adult sound system. The classic proponent of the

discontinuity school is Jakobson 1941/1968, who claimed that the pairing of sound and meaning drastically alters the child's sound system. Jakobson's arguments for discontinuity are here evaluated on the basis of data on the transition from babbling to speech in a single set of children recorded weekly in two contexts: mother–child interaction and solitary play. Using the data from the mother–child context, and comparing the sound system of babbling with that of the early words in terms of the distribution of consonants, vocalisation length, and phonotactic structure, the authors find striking parallelism between babbling words within each child, across time and within time period. The data constitute strong evidence for continuity.

86–125   Wagner, Klaus R. (U. of Dortmund). How much do children say in a day? *Journal of Child Language* (Cambridge), **12**, 2 (1985), 475–87.

From the author's own recordings, it was found that children aged between 5 and 15 years speak some 20,000 words of discourse per day (tokens). For this they take about 2–3 hours of pure speaking time. They have an active vocabularly of some 3,000 word-form types (different words). This corresponds to an active basic form vocabularly of roughly 2,000 words.

86–126   Wiener, Linda F. The evolution of language: a primate perspective. *Word* (Mitford, Ct), **35**, 3 (1984), 255–69.

Human language can be studied as an evolved behaviour which functions as part of an integrated communication system. Recent studies of non-human primate vocalisations suggest that their vocal systems are more complex than has previously been realised, containing syntactic rules, duality of patterning, and traditionally transmitted components. It is necessary to study these features in a broad range of primates before we can confidently label them as precursors of such features in human language. Studies of chimpanzee cognition and 'language' learning indicate that these animals are quite sophisticated and have mental processes very much like those of humans. These facts make hypotheses about the absolute uniqueness of human language and cognition seem much less attractive.

PRAGMATICS

86–127   Blum-Kulka, Shoshana (Hebrew U., Jerusalem) **and Olshtain, Elite** (Tel Aviv U.). Requests and apologies: a cross-cultural study of speech act realisation patterns (CCSARP). *Applied Linguistics* (Oxford), **5**, 3 (1984), 196–213.

A discourse completion test was administered to groups of 200 native speakers and 200 learners in each of seven target languages: Australian, American and British English, Canadian French, Danish, German and Hebrew (plus Russian projected). The aim was to elicit forms used for apologies and requests under various conditions of formality, and thus explore the universality or otherwise of pragmatic rules.

The data have not yet been fully analysed, but an outline of the coding system

devised for their analysis is presented. Requests can be at three levels of directness, and can be expressed by nine request strategy types ranging from 'mood derivable' (*leave me alone*) to 'mild hints' (*I'm a nun* to persistent boy), sometimes modified by hedges, downtoners, intensifiers, expletives, sweeteners, disarmers, etc. Apologies can be expressed directly with an explicit performative verb, or indirectly, for example by explanation of cause, acknowledgement of responsibility, offer of repair or promise of forbearance.

Preliminary analysis supports expectations of universality in some features, but also reveals wide cultural variation.

86–128 Caffi, Claudia. Some remarks on illocution and metacommunication. *Journal of Pragmatics* (Amsterdam), **8**, 4 (1984), 449–67.

This paper raises a number of questions dealing with potential relationships between (some aspects of) illocution and (some aspects of) metacommunication which give rise to theoretical problems. In particular the problem of a metacommunicative re-interpretation of illocutionary markers and the problem of 'metacommunicative speech acts' is discussed. From this discussion it becomes clear that 'metacommun-icative speech acts' may function as a meeting point between general questions, related to discourse sequencing and others, related to discourse hierarchy.

86–129 Corraze, J. (U. of P. Sabatier, Toulouse). Des communications non verbales aux langages naturels. [From non-verbal communication to natural languages.] *Revue de Phonétique Appliquée* (Mons, Belgium), **71/2** (1984), 197–204.

Non-verbal communication in humans takes diverse forms: it may be directly translatable into natural language, or merely accompany it; it may be integrated with language so as to constitute paralanguage, or totally unrelated to it.

Discussion of the relationship between verbal and non-verbal communication has been bedevilled by conflicting theories concerning the origins of language and the uniqueness, or otherwise, of human language. However, most authorities are by now agreed that non-verbal communication preceded verbal communication, and there is evidence that communication between animals is more complex than was previously thought; the great apes in particular using organised vocalisations to transmit not just emotive cries but factual information about their surroundings. This type of communication which human beings share with the animal kingdom, has been taken a stage further by humans into the realm of abstract ideas. Non-verbal communication constitutes a system in its own right and does not just duplicate natural language. It is highly contextualised and cannot be divorced from social relationships and social interaction.

86–130 House, Juliane (U. of Hamburg). Some methodological problems and perspectives in contrastive discourse analysis. *Applied Linguistics* (Oxford), **5**, 3 (1984), 245–54.

The article examines methodological issues arising from the inclusion in contrastive discourse analysis of pragmatic factors in communication. Its aim is to show how such

analysis can provide a contribution to second language acquisition. The project involved English and German native speakers, and the data consisted of a small corpus of utterances which were audio-recorded.

Analysis of opening and closing phrases, conversational strategies (*em*, *oh*), discourse 'lubricants' (*you know*, *I mean*), and central illocutionary acts (requests, complaints) was conducted, at increasingly complex levels.

Methodological issues which arose from the investigation concern the depth of analysis, the question of whether categories of analysis in one language are appropriate in the other, the problem of including an unavoidably large number of pragmatic variables, constraints arising from the selection of data which is of special interest to the analyst or according to whether it is susceptible of analysis, and the lack of the entire context surrounding an utterance. The assumption of strong cultural similarity between two language communities is not always valid, linguistic and pragmatic variables in communication in one language are not identical to those of the second language (the various forms which express a request in English are not necessarily the same as those in German).

Prior to analysis, a detailed investigation of pragmatic variables in communication should be carried out, and larger and video-recorded samples should be made. Such analyses of empirical data are likely to enable the determining of sounder objectives in teaching translation, and in preparing pedagogic grammars and teaching materials, for example.

86–131 Kindt, Walther and Weingarten, Rüdiger (U. of Bielefeld, FRG). Verständigungsprobleme. [Communication problems.] *Deutsche Sprache* (Berlin, FRG), **3** (1984), 193–218.

Communication problems are best seen as discrepancies between the meanings attributed to utterances by discourse participants which exceed the participants' tolerance level; this level varies according to the purpose of the discourse, for example it may be quite high in 'small talk'. We can distinguish between problems of formulation and of understanding, and also between those of language and of content; further refinements include allowance for divergent perception of context, as when a news bulletin in a science fiction broadcast is heard as real news. Categorisation of a problem, and even opinion about whether there is a problem at all, may vary between speaker, listener and third party, and for each of these may vary from moment to moment.

Repair of problems typically involves a special discourse pattern of four phases – pattern initiation, problem initiation, problem solution, pattern termination. An example from a corpus of spoken German (TGDS Freiburg) is analysed.

86–132 Motsch, Wolfgang. Sprechaktanalyse – Versuch einer kritischen Wertung. [Speech act analysis – attempt at a critical evaluation.] *Deutsch als Fremdsprache* (Leipzig, GDR), **21**, 6 (1984), 327–34 (Pt I) *and* **22**, 1 (1985), 1–8 (Pt II).

The speech act theories of Austin and Searle are restated in detail, and two main criticisms are made. The first relates to the claim that a sentence of any grammatical

form can, in a suitable context, have any illocutionary function: the alternative proposal is that each sentence form uniquely determines an illocutionary function, but this can, in special contextual circumstances, either be transformed into a different function or imply an additional speech act with another function. The second criticism is that Searle's general statements about speech acts, based on the example of 'promising', lack theoretical rigour and in fact apply only to cases like 'promise', 'request' and 'order'; four other categories, exemplified by 'describe', 'answer', 'repeat' and 'amuse', each require a different treatment.

86–133   Newman, Jean E. (U. of New Mexico). Processing spoken discourse: effects of position and emphasis on judgements of textual coherence. *Discourse Processes* (Norwood, NJ), **8**, 2 (1985), 205–27.

Three experiments explored the proposal that methods of marking new information serve a topic-promotion function during the processing of spoken discourse. Two devices commonly discussed as important for determining information structure – intonational emphasis and sentence position – were manipulated factorially. Subjects made coherence judgements for active sentence pairs in which the topic of Sentence 2 was congruent with either the subject or object of Sentence 1. A consistent judgement time advantage was found for object-relevant continuations but effects of emphasis were restricted to the object position in the first experiment and were not obtained in subsequent experiments. The object advantage was shown to depend on the intersentence delay, thus implicating a new-information-last principle as an important means of maintaining local cohesion and facilitating the listener's task of integrating spoken discourse.