
Research in the supporting sciences

Phonetics and phonology

89-105 Maurus, M. and others (Max-Plank Inst. für Psychiatrie, Munich, FRG). Acoustic patterns common to human communication and communication between monkeys. *Language and Communication* (Oxford), **8**, 2 (1988), 87-94.

The literature dealing with a phonetic approach to the problem of the comparability between human and animal communication is reviewed. Frequency modulation in the calls of several monkey species has been found to influence significantly conspecifics' responses. Changes in the power spectrum of calls appear to have a communicative function in certain species. Amplitude modulation can be categorically differentiated by squirrel monkeys according to the number of peaks in a call. Duration

of calls also appears to have significance. All these components are found in human speech with grammatical and/or lexical function. Only accurate measurement of conspecifics' responses can confirm the existence of structural components such as phonemes, morphemes, clauses, etc. in animal calls. At present the difference between human and monkey communication seems to be quantitative rather than qualitative.

89-106 Watanabe, Kazuyuki (Shiga U., Japan). Sentence stress perception by Japanese students. *Journal of Phonetics* (London), **16**, 2 (1988), 181-86.

This paper describes an experiment which attempted to test the hypothesis that the Japanese perceive accent on the highest pitched syllable in an English utterance. A group of 120 Japanese students and another group of 27 Australian students were asked to point out the intonational nucleus in 25 utterances. The results indicate that the Japanese subjects were

less successful than the Australian subjects in identifying sentence stress in utterances in which the F_0 difference between the highest and the second highest syllable was smaller than 70 Hz. In utterances with a F_0 difference larger than 70 Hz the Japanese subjects' stress perception was the same as that of the Australian subjects.

Sociolinguistics

89-107 Cummins, Jim (Ontario Inst. for Studies in Education). Position paper: the role and use of educational theory in formulating language policy. *TESL Canada Journal* (Montreal), **5**, 2 (1988), 11-19.

Research and theory only influence policy decisions in language and educational debates when there is a relatively high degree of consensus regarding societal and educational aims. American and Canadian bilingual education schemes are examined to reveal the important role played by sociological factors in determining policy.

Research findings alone are not always applicable in different situations - they must be viewed within the framework of a coherent theory. The two opposing theoretical assumptions dominating American bilingual education are shown to be inadequate and a problem-solving method is outlined.

Policy debates have largely ignored socio-political considerations. The successful Canadian immersion

programme, whereby English speakers are taught in French, is contrasted with the failure of American schemes, which reject similar research findings. Canadian students belonged to the dominant social group, whereas American students not only belonged to subordinate groups, but were also increasing in number, which made the dominant group feel threatened.

Two conclusions are drawn. Firstly, that the central role of theory is minimally understood by policy-makers and secondly, that socio-political factors related to power and status relations between dominant and subordinate groups play a major role in assigning importance to particular issues and to research, and in applying these findings to policy.



89-108 Gudykunst, William B. and Schmidt, Karen L. (Arizona State U.)

Language and ethnic identity: an overview and prologue. *Journal of Language and Social Psychology* (Clevedon, Avon), **6**, 3/4 (1987), 157-70.

This article offers an overview of the study of language and ethnic identity. The general role of language in social categorisation and the influence of social categorisations on language attitudes, as well as the specific influence of ethnic identity on the microsociolinguistic, macrosociolinguistic, and

social psychological aspects of language use, language attitudes, sociolinguistic stereotypes, ethnolinguistic vitality, and speech accommodation are reviewed. Contributions to the volume in which this article appears are also outlined in the context of the areas of research being discussed.

89-109 Luchtenberg, Sigrid (Essen U., FRG). Language varieties and

intercultural education. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **9**, 1/2 (1988), 141-9.

Most investigations of bilingualism as well as in the teaching of a second language ignore the fact that L1 and L2 each consist of a whole array of varieties with certain rules and functions depending on the situation of communication, the role of the participants, etc. This paper claims that language varieties represent an important aspect of the development of bilingualism. This is demonstrated regarding the situation of migrant children in West Germany. Thus language varieties have also to be taken into account with regard to language teaching (here: German as a second language). Three kinds of

competence will be expected of migrant children with respect to the different varieties: productive, reactive and receptive competence. It is shown that most of the language varieties – especially situational ones – are connected with cultural developments. Therefore, they often show many sociocultural implications for language and behaviour rules. Migrant children who fail in the understanding and use of language varieties often lack the necessary sociocultural knowledge. Intercultural education turns out to be the method of instruction that could lead to better results.

89-110 Mackay, Ronald (Concordia U., Montreal). Position paper: program

evaluation and quality control. *TESL Canada Journal* (Montreal), **5**, 2 (1988), 33-42.

The author discusses the meaning of language programme evaluation, its possible purposes, what components can be evaluated, and the role of the evaluator. A successful evaluation must address the concerns of the 'stakeholders', especially the 'principal stakeholders', those most affected by the outcome of the evaluation. (The principal stakeholder is usually but not necessarily the programme manager, and the commissioner of the evaluation.)

It must answer their questions, with professional rigour, in a form which they understand and find credible, and in time for them to take action. An evaluation is worth doing if the principal stakeholders show that it will provide them with information which is otherwise unobtainable, and which can and is likely to be put to profitable use.

89-111 Mohan, Bernard and Helmer, Sylvia (U. of British Columbia). Context

and second language development: preschoolers' comprehension of gestures. *Applied Linguistics* (Oxford), **9**, 3 (1988), 275-92.

There is wide agreement that non-verbal information, and contextual information generally, plays an important role in language understanding for second language learners. This raises the question of whether learners understand non-verbal communication. The 'traditional' view of the role of context in language learning assumes that they do. The

'social semiotic' view does not, holding that contextual understanding is developed in the process of communicative interaction. Contextual understanding is therefore likely to vary with age and cultural familiarity.

This paper investigates the understanding of English speakers' gestures by preschool children,

comparing native English speakers (age four to five) with non-native speakers. Thirty-six emblems and illustrators, two forms of commonly used gestures, were decoded by 40 children, 20 native speakers, and 20 English as a second language (ESL) speakers. The gestures chosen were screened by a panel of 10 ESL teachers who considered them to be typical of classroom interaction.

It was found that the children, on average, understood about half of the gestures. ESL children understood less than native speakers. Analysis of variance results indicate that there is an effect for age

as well as a strong effect for cultural familiarity (native speakers vs. ESL). There were significant correlations for the sequence of acquisition of gestures across all groups.

Results therefore contradicted the 'traditional' view and were consistent with the 'social semiotic' view. It is suggested that research on the role of context in second language learning should take account of the social semiotic view and study the mutual development of language learning and cultural learning in the process of communicative interaction.

89-112 Novak-Lukanovič, Sonja. Bilingual education in Yugoslavia: some experiences in the field of education for national minorities/nationalities in Yugoslavia. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **9**, 1/2 (1988), 169-76.

Yugoslavia is a multinational, culturally pluralistic and multilingual society. The multilingualism is reflected not only in the use of the languages of the national minorities/nationalities but also in the diversity of languages of the nations of Yugoslavia. The equality of these languages is also reflected in the system of education, through which it is possible for the members of various nations and national minorities/nationalities to be educated in their mother tongue. In individual republics and provinces, different forms of education have been developed in accordance with tradition and the specific needs of life, in which the function of the individual languages is variously defined. In the nationally mixed regions, depending on whether the minority language is mother tongue (L1) or

second language (L2) in the curricula, the following typology is used: Type A, minority language (L2) is the language of instruction; Type B, bilingual education: Type C, minority language (L1) is the subject of instruction; and Type D, minority language (L2) is the subject of instruction. The aim of education in the nationally mixed regions of Yugoslavia is, among other things, to develop the motivation for equal use of the languages, so the language of national minority/nationality also becomes an appropriate instrument for communication in public and social life and is not restricted to usage in private life. The system of education represents only the first institutional level which leads to the development of bilingualism.

89-113 Punetha, Deepa (U. of Allahabad, India) **and others.** Ethnicity and immigrant values: religion and language choice. *Journal of Language and Social Psychology* (Clevedon, Avon), **6**, 3/4 (1987), 229-41.

While the British literature on multilingualism has invoked value differentials not only between Asian immigrant groups and the host culture but also amongst the former, no empirical evidence actually exists. Hence, an extended Rokeach Value Survey was administered to three Asian groups (Hindus, Muslims and Sikhs) and to a British indigenous sample; the bilingual immigrants were offered a choice of the questionnaire in their own ethnic

tongue or in English. Canonical variate analyses showed large intergroup value differentials with language choice having an effect for all Asian groups (greatest for Sikhs and least for Hindus). The specific differentials, however, depended on the dimension examined. Immigrants choosing English had a value position intermediate to the indigenous group and the Asians choosing their in-group tongue.

89-114 San Antonio, Patricia M. (Arizona State U.). Social mobility and language use in an American company in Japan. *Journal of Language and Social Psychology* (Clevedon, Avon), **6**, 3/4 (1987), 191-200.

This paper is based on a year of ethnographic research in an American company in Japan. The company, a high-tech computer firm, has a policy

of requiring English to be used in all overseas offices. Like most other foreign companies in Japan, this company has difficulty attracting high quality

Japanese employees. They need to hire Japanese managers who have both business experience and English language skills. At the same time the company attempts to compete with the Japanese business community by hiring new college graduates, overlooking the English language requirement. As a result, there is considerable variation in the English language abilities of Japanese employees. This causes problems because the American managers insist on the use of English for meetings, classes and any interactions involving foreigners. English

facility and the ability to deal with Americans socially becomes a source of power for English proficient Japanese employees. The use of English and Japanese in the company becomes an important means of restricting access to information as well as a source of power and advancement to a subset of employees. Ethnographic examples of language use in the company as it relates to the issue of power brokerage and employee advancement in the company are presented in the paper.

Psycholinguistics

89-115 Bialystok, Ellen (York U., Ontario). Aspects of linguistic awareness in reading comprehension. *Applied Psycholinguistics* (Cambridge), **9**, 2 (1988), 123-39.

The relation between reading comprehension and linguistic awareness is discussed in terms of a set of processing skills common to both these activities. Two metalinguistic skill components are identified and examined for their relative contribution to reading comprehension. The general hypothesis is that these skill components explain a significant portion of the variance in reading comprehension. The two skill components are operationalised in terms of a battery of metalinguistic tasks, each of which is claimed (by means of task analysis) to rely primarily on one or the other processing component

for its solution. A study is reported in which 8-year-old children are tested with these metalinguistic tasks, general measures of intelligence, and a test of reading comprehension. The results show that the relation among performance on the metalinguistic tasks is strongest for those tasks relying on the same processing skill component and that one of these components is most significant in determining the child's level of reading comprehension. These findings are interpreted in terms of the underlying linguistic processes involved in reading.

89-116 Byrd, Mark (U. of Kansas). Adult age differences in the ability to comprehend ambiguous sentences. *Language and Communication* (Oxford), **8**, 2 (1988), 135-46.

There are two main theories to account for the effects of context on word recognition: one suggests that two separate processes are used in word recognition ('automatic' and 'effortful'), the other that individuals have two different semantic strategies for using the context of a sentence as an aid in lexical access - they may use the sentence context to predict either the occurrence of a specific word or to expect the occurrence of a large number of related words. A key difference between these two theories centres around the use of automatic and effortful word recognition procedures. This study sought to test these two models by examining the manner in which two groups known to differ in their ability to use automatic and effortful information processing strategies, namely young and old adults, read and comprehend sentences. In an experiment, participants were presented with a pair of sentence fragments and asked to determine whether the two fragments, taken together, formed a coherent and meaningful sentence.

Results showed that the presence of ambiguous information produces considerable differences in the manner in which young and old adults comprehend sentences. Young adults were disrupted only momentarily by the presence of lexical ambiguity, when the fragment break occurred before the clause boundary. For older adults, there was a great amount of ambiguity-related disruption in their sentence-comprehension efforts. The presence of lexically ambiguous words disrupted their ability to read both the first and second sentence fragments in the pre-clause and clause break conditions, indicating that older adults do not resolve ambiguity as soon as they encounter it, but seem to wait until the clause boundary occurs to interpret the meaning of ambiguity.

The results seem to provide some support for the two process theory, which suggests that word recognition is accomplished primarily by a series of automatic lexical access strategies. Young and old adults displayed the same context-related facilitation

effect when reading unambiguous sentence fragments, suggesting that both groups use the same automatic word recognition strategies to process unambiguous sentences. The presence of ambiguous

information, which presumably forced the use of effortful word-recognition strategies, negatively affected the older adults' reading times to a greater extent.

89-117 Coates, Jennifer (Roehampton Inst., London). The acquisition of the meanings of modality in children aged eight and twelve. *Journal of Child Language* (Cambridge), **15**, 2 (1988), 425-34.

Little is known about children's acquisition of modality. It seems clear that at the age of five, when they are said to be linguistically competent, children have not mastered the adult system of modal meaning. This paper describes research which tests children's understanding of modal meaning at the ages of eight and 12. The results of these tests are compared with the results of the same test on adult

informants. The research uses the card-sorting method devised by Miller (1971) to investigate semantic similarities and dissimilarities; cluster analysis of the data reveals the underlying patterns. Tests revealed that eight-year-old children have only a rudimentary system of modal meaning, and even by the age of 12 a child's system will not be isomorphic with the adult system.

89-118 Galambos, Sylvia Joseph and Hakuta, Kenji (Yale U.). Subject-specific and task-specific characteristics of metalinguistic awareness in bilingual children. *Applied Psycholinguistics* (Cambridge), **9**, 2 (1988), 141-62.

The relationship between bilingualism and metalinguistic awareness was explored in Puerto Rican Spanish- and English-speaking children. All subjects were from low-income backgrounds and were enrolled in a transitional bilingual education programme in the United States. Two longitudinal studies were conducted. The first study examined the abilities to note and correct ungrammatical sentences in Spanish. Subjects were 104 children in first and second grade at the beginning of the study. They were followed over a period of two years. The second study looked at the ability to detect

ambiguity in sentences, and to paraphrase the different meanings. There were 107 subjects who were in fourth and fifth grades, and were also followed over a two-year period. The results from both studies indicated that native language proficiency as well as the degree of bilingualism affected metalinguistic awareness. The results also indicated that these effects interacted with the types of items in the metalinguistic tasks. This suggests that both subject-specific and task-specific factors are important in understanding the relationship between bilingualism and metalinguistic awareness.

89-119 Guthrie, John T. (U. of Maryland). Locating information in documents: examination of a cognitive model. *Reading Research Quarterly* (Newark, Del), **23**, 2 (1988), 178-99.

Reading documents to locate specific information is a challenge to young adults as well as children. According to the 1986 National Assessment of Educational Progress (NAEP), about 50 per cent of high school graduates fail tasks that require matching three elements in a question with three elements in a corresponding document, such as a plane schedule. A task analysis of such items shows that performance depends heavily on analytical reasoning. A cognitive model proposed to account for performance includes (1) formation of a goal, (2) selection of an informational category, (3) extraction of the information, (4) integration of the information, and (5) recycling until the goal is met. To study this

cognitive model, the author constructed computer presentations of two such tasks. Interactions of the reader with the computer-based documents were automatically recorded by the computer, to form measures of the reader's efficiency on components 2-5. In Study 1 with 26 college students, scores on components 2-5 accounted for 68 per cent of the variance in performance. Efficiency on components 2, 3, and 4 improved significantly when students answered three questions in succession on the same document. In Study 2 with 24 college students, the author measured transfer of ability to perform the three-feature-match task between two documents drawn from the NAEP assessment. Analyses

showed overall performance was facilitated; increased efficiency at category selection (2) and integration of information (4) appeared to mediate the transfer. Locating information in documents

thus appears to warrant a unique cognitive process model that is more similar to analytical reasoning than to language processing or visual search.

89-120 Mervis, Carolyn B. and Mervis, Cynthia A. (U. of Massachusetts, Amherst). Role of adult input in young children's category evolution. I. An observational study. *Journal of Child Language*(Cambridge), **15**, 2 (1988), 257-72.

Three factors have been hypothesised to play an important role in the reduction of children's initial overextensions: spontaneous adult use of the correct label, correction of the child's errors, and demonstration of the important attributes that make an object a member of its adult category. The role of these factors was examined in relation to data collected from a longitudinal study of early lexical

development. This study used an observational methodology combined with systematic comprehension and production testing. Results indicated that demonstrations were the most important factor in inducing toddlers to assign an object to its adult category. The question of why purely linguistic input initially plays a minor role in changing children's categories is discussed.

89-121 Moreau, M.-L. (U. of Mons). Les domaines de la psycholinguistique développementale. [Sectors of developmental psycholinguistics.] *Revue de Phonétique Appliquée* (Mons, Belgium), **86** (1988), 23-42.

Earlier psycholinguistic models regarded linguistic competence as including three components: phonology, lexicon and syntax. Contemporary psycholinguistics considers in addition a communicational component, a pragmatic component, a textual component, etc. These distinctions can be useful for

isolating research areas. However, the various components are not autonomous. Children do not learn language one aspect after another; on the contrary, there is some evidence that learning develops simultaneously in all the sectors.

89-122 Palmberg, Rolf (Åbo Akademi). On vocabulary-knowledge continua and foreign-language learners' mental lexicons. *Finlance* (Jyväskylä, Finland), **7** (1988), 93-100.

This paper discusses 'knowledge' of vocabulary, defined as a continuum between the ability merely to make sense of a word and the ability to activate/produce it automatically. At one end of the spectrum is 'potential' vocabulary; learners in this case can understand previously unencountered words by using interlingual, extralingual (i.e. background knowledge/knowledge of the world) and intralingual cues.

L2 mental lexicons differ significantly from those of native speakers, and comprise two parts, a phonological/orthographic code and a semantic entry for each word. Real vocabulary would thus

consist of words which could be recalled at will, and mapped appropriately on the full range of possible meanings.

The author presents a vocabulary-knowledge continuum graph to illustrate how one might visualise the number of words learnt at certain points and how words move from being passive to 'active'. He concludes by highlighting key issues needing further research, for example whether there are identifiable thresholds or whether words become fully integrated into the learner's mental lexicon only gradually.

89-123 Randall, Mick (West Sussex Inst. of Higher Ed.) and **Meara, Paul** (Birkbeck Coll., U. of London). How Arabs read Roman letters. *Reading in a Foreign Language* (Oxford), **4**, 2 (1988), 133-45.

Reading in a foreign language is, for many learners, not so much a problem of understanding at the text level as of processing at the word level, particularly if their L1 is written in a script which is radically

different from the Roman script used to write English. This paper looks at the way native speakers of Arabic process strings of Arabic letters, and compares this with the way they process strings of

Roman letters. Earlier research shows that native English speakers develop special ways of processing arrays of letters: their pattern of responding gives rise to a characteristic 'search function' which is U-shaped for letter targets and a tilted M-shape for digit targets.

In the experiments, subjects were shown a target letter followed by a series of 5 letters, and their task was to say as quickly as possible whether the target letter appeared in the series or not. In two experiments, a set of Arabic letters was used, and in a third, a set of Roman letters was used. In the first experiment, subjects were Saudi Arabian trainee teachers at college in England to train as middle school English teachers. The pattern of results was basically U-shaped but superimposed on this was a right-to-left linear component, suggesting that reading direction is an important factor in the way that native Arabic speakers search arrays. Arabic speakers, however, differ radically from users of the Roman alphabet (RAs) in other details of the scanning process. The U-shaped curve produced by this group of subjects is the typical curve produced by RAs when they search arrays of shapes.

The second experiment was undertaken to test whether the results found in the first experiment were also to be found in native Arabic speakers with

a more sophisticated academic background (Algerian graduate students studying English prior to taking up postgraduate courses in England). This group produced very similar results to the first group, indicating that academic sophistication was not a major factor in the effects observed.

The third experiment aimed to see whether Arabic native speakers transfer the scanning strategies used on arrays of Arabic characters to the reading of English, or whether they adopt different strategies. Subject were a sub-group of those in the first experiment and were having intensive English language tuition over a period of a year. It was found that this group did produce some changes in their search strategy when presented with English characters. The linear right-to-left component was no longer a significant feature, but the characteristic U-shaped component was retained in scanning Arabic and Roman characters. As their English improved, reading speeds increased, but there was no sign of their adopting the M-shaped curve produced by RAs.

If Arab learners of English continue to rely on inefficient strategies, they will always be faced with difficulties on the level of word processing. They will need considerable training if they are to be taught more efficient word-handling strategies.

Pragmatics

89-124 Bonikowska, Małgorzata P. (Warsaw U.). The choice of opting out. *Applied Linguistics* (Oxford), **9**, 2 (1988), 169-81.

Pragmatic research dealing with speech acts has invariably focused on analysing the speaker's performance of speech acts (strategies employed, factors affecting speech-act performance, etc.). This paper argues for including the analysis of the 'opting out' choice (the speaker's decision not to perform a speech act) into the realm of pragmatic study. The opting out choice is as much a pragmatic choice as

any strategic choice employed in speech-act performance, made through activating the same components of pragmatic knowledge. Analysing reasons for opting out reported by speakers can help validate claims about conditions for speech acts and factors influencing speech-act performance. The data presented to illustrate the point come from the study of the speech act of complaining.

89-125 Dendrinou, Bessie (U. of Athens). Cross-cultural issues in conversation. *Journal of Applied Linguistics* (Thessaloniki, Greece), **2** (1986), 37-50.

Some personal observations on Greek conversational behaviour are offered. Norms for what counts as appropriate speech behaviour vary from culture to culture and context to context. Conversational signals, such as attention-getting devices and initiation signals, are universal phenomena but their realisation is culture-specific. When members of different cultures enter a conversational encounter, the inability to emit and perceive signals adequately results in misconceptions, misinterpretations, negative stereotyping and feelings of hurt and annoyance.

Examples of conversational signals in Greek and English are discussed: (1) conversation initiation signals (paralinguistic attention-getters, linguistic conversation-initiation signals), (2) consolidation conversation signals (in-tune signals, face-saving signals). Some notable differences under (1) are that direct eye-gaze is required in Greek conversation, whereas with English speakers who are strangers it would be accounted impolite; small talk (phatic communion), acceptable to English speakers, is regarded as odd or insincere by Greeks. Both the

verbal and non-verbal behaviour of Greek speakers is more intimate and 'committed' than that of English speakers, for whom the former behaviour may seem intrusive or pushy. In Greece, conversation with a stranger often begins after an

introduction by a third party who gives all the background information normally covered during small-talk. Under (2), the different interpretations of nodding, head-shaking and touching, as well as complimenting, are discussed.

89-126 Löttscher, Andreas. 'Indirektheit' und Ellipse in Sprechaktsequenzen. ['Indirectness' and ellipsis in speech act sequences.] *ZGL* (Berlin, FRG), **16**, 1 (1988). 46-61.

Searle's theory that indirect speech acts have both a literal illocutionary force and a secondary (*sic*) illocutionary force, representing the actual meaning of the utterance, is unacceptable for two reasons. Firstly, it fails to provide a systematic overall description of how the indirect illocution is derived from the literal one. Secondly, the logical relationship between the two illocutionary forces is unclear. An alternative way of describing indirect speech acts is in terms of elliptical sequences. For example, in indirect answers the word *yes* or *no* may be omitted: *Did Martha drive to town? (No), her car is still in the garage.* In indirect questions a sequence may be

omitted: *Do you know what the time is? (Yes.) (Can you tell me it then?) 8 o'clock.* The principles are that only that which is relevant to the goal is expressed, that all speech acts can be seen as part of a wider communicative activity, and that the addressee cooperates in this activity by contextualising what is said. Thus the speech act need contain only that which is literally expressed. It is not denied that indirect forms sometimes become idiomatic, nor is it claimed that indirect speech acts can always be explained by ellipsis. The author believes, however, that the concept of 'indirectness' should be used sparingly and that its use is rarely convincing.