

Phonetics and phonology

88-491 Grover, Cynthia (Memorial U. of Newfoundland) **and others**. Intonation in English, French and German: perception and production. *Language and Speech* (Hampton Hill, Middx), **30**, 3 (1987), 277–96.

This article reports the results of three experiments which investigated the role of intonation in foreign accent. It was found that adult French, English and German speakers differ in the slopes (fundamental frequency divided by time) of their continuative intonation. Monolingual English and French children also differ in their continuative intonational slopes. Students who are native English speakers but attend French immersion schools, acquire appropri-

ate French continuative intonation by age 10, but at age 16 they typically use English intonation when they speak French. A perception experiment showed that no language group chose intonation patterns with slopes based on native production data to be more native-like than those with slopes based on non-native data. Some remarks are made about language acquisition in the immersion setting and about convergence in intonational function.

88-492 Kreidler, Charles W. (Georgetown U.). Stress differentiation in sets of English words. *Word* (Miford, Ct), **38**, 2 (1987), 99–125.

17,000 common words were examined to see how far word stress can be determined by class-membership and how far (nearly) homophonous word-pairs like 'insult (n.) and in'sult (v.) can be differentiated by stress. Stress-assignment in citation forms is relatable to a complex of factors, phonological (heavy and light syllables), morphological (affix-types) and syntactic (word-class) [examples]; 'prestige' pronunciations of words of recent French origin may also play a part. It was found that among unaffixed words: nouns typically have initial stress; verbs of similar formation and two-syllable verbs in general are overwhelmingly stressed on the final syllable, although some verbs in Am. English are

coming to be stressed alternatively on the first, under influence of a heavy initial syllable and/or the existence of a matching noun with initial stress; it is therefore doubtful whether, as some claim, stress differentiation is spreading (at least in Romance-derived items which lack semantically explicit prefixes). On the other hand, in noun-verb pairs containing prefixes of Old English origin and locative-directional meaning, stress-differentiation is preserved, and in compound nouns such as *lookout*, derived from a verbal lexeme consisting of verb + particle, such differentiation is part of a productive process.

88-493 Ladefoged, Peter (UCLA). Revising the International Phonetic Alphabet. *UCLA Working papers in Phonetics* (Los Angeles, Ca), **68** (1987), 1–9.

The IPA, as a common core of phonetic symbols, is sadly out-of-date. While the needs of users such as speech pathologists, communication engineers, and psycholinguists have to be taken into account, a theory of linguistic phonetics will be implied; the symbols should reflect the feature systems that divide and combine segments into natural classes. Two historic principles of the International Phonetic Association have, however, to be respected: a separate symbol must be available for each distinctive sound within a language; the same symbol should be used for similar sounds across languages.

This conjunction of the phoneme principle with the assumption that there is a universal set of phonetic categories leads Ladefoged and Maddieson to propose 17 fundamental places of articulation, which can then be grouped into more general categories [tables]. The latter will be provided with simple symbols, with more specific differences being marked by diacritics. Some agreement on diacritics is also needed, especially for those using typewriters or word-processing systems, to avoid the proliferation of personally defined symbols.

Sociolinguistics

88–494 Dabène, Louise (U. of Grenoble III), De quelques obstacles culturels et linguistiques à la communication interethnique. [Some cultural and linguistic obstacles to interethnic communication.] *Bulletin CILA* (Neuchâtel, Switzerland), **47** (1988), 18–23.

Lack of understanding, or misunderstanding, between people of different cultures stems from cultural as well as linguistic differences. Attitudes and cultural practices can distort the meaning conveyed by the language. Two main areas are considered. (1) The methods used by each social group to construct and regulate its members' behaviour. Different societies can express the same idea in a variety of ways. It is not sufficient to know how to express oneself, but also to know when one can, or has to, express oneself. Difficulties can arise when linguistic activity is accompanied by a non-linguistic act. Rules of conversational propriety, such as the Oriental

customs of only speaking when asked to, and concealing emotion, need to be analysed by linguists and anthropologists together. (2) The collection of society's values and unwritten rules which separate what is considered as desirable from what is considered lawful, or tolerable. Misunderstandings often arise from the different aims of people from different cultures. Japanese speech tries to avoid conflict; European speech is more straightforward. It is not advisable to transfer teaching strategies from one culture to another or to adopt uniform behaviour for people of diverse origins.

88–495 d'Anglejan, Alison and Masny, Diana. Déterminants socioculturels de l'apprentissage du discours décontextualisé en milieu scolaire: vers un cadre théorique intégré. [Sociocultural determinants of the learning of uncontextualised discourse in a school setting: towards an integrated theoretical framework.] *Revue Québécoise de Linguistique* (Montreal), **16**, 2 (1987), 145–62.

The disparity between the scholastic performance of children belonging to majority and minority groups should normally decrease with schooling. Nevertheless, it is the opposite that is the case. This paper sketches the outline of a theoretical framework that should help to understand the great complexity of the problem and allow a deeper comprehension of one of its aspects: the interaction between culture and cognition.

Schema theory is used to explain certain difficulties in reading and writing, based on the fact that

differences in cultural experiences give rise to the development of different schemas for individuals coming from different cultures. The schooling process, which should contribute to extending the repertory of the child's cognitive, social and linguistic schemas, is in fact the origin of one aspect of the paradox in question; being focused on basic skills, scholastic programmes offer a context that is not conducive to the emergence of certain essential cognitive schemas.

88–496 Duzelier, Nicole (CEFISEM, Clermont-Ferrand). De la scolarisation des enfants migrants à la pédagogie interculturelle. [Migrant children and intercultural education.] *Langues Modernes* (Paris), **82**, 2 (1988), 45–52.

Immigration is no new phenomenon. But children of migrants were treated as if they were French (any differences or any special problems being disregarded) until the 1970s, when reception classes to teach them French were instituted and cultural differences were accorded recognition. However, there is a danger that by stressing 'difference', stereotypes will be reinforced. And intercultural

activities often lack the element of reciprocity and are not genuinely intercultural.

Stereotypes should be eliminated. Interculturalism concerns not only the school but also society. We should aim to transcend cultural differences while being able to accept them and recognise their legitimacy.

Psycholinguistics

88-497 Bialystok, Ellen (York U., Ontario) **and Mitterer, John** (Brock U.)
Metalinguistic differences among three kinds of readers. *Journal of Educational Psychology* (Washington, DC), **79**, 2 (1987), 147-53.

Two types of poor readers were identified and compared with each other and with a comparable group of good readers for their performance on a series of metalinguistic tasks. The specific problem underlying each of the two types of poor readers is shown to be related to two separable components of

metalinguistic skill. The results of the study are used to support the argument that global analyses of reading and metalinguistic skills are not adequate for understanding either the structure of each skill or the relation between them.

88-498 Britton, Bruce K. and others (U. of Georgia). Effects of text organization on memory: test of a cognitive effort hypothesis with limited exposure time. *Discourse Processes* (Norwood, NJ), **9**, 4 (1986), 475-87.

Cirilo and Foss (1980) found that subjects spent more time reading important information than unimportant information in 12 stories. Important information was also free recalled better, reconfirming the 'levels effect'. The reading time differences are consistent with a processing time hypothesis for the levels effect. This paper reports three experiments that support an alternative hypothesis based on cognitive effort. In Experiment 1, Cirilo and Foss's reading time findings were replicated. Then the subject-controlled reading times observed in Experiment 1 were used in Experiments 2 and 3 to limit exposure times for important information to values less than those that

had been self-selected by the average subject. Experiment 2 showed that the levels effect in free recall was still present with exposure times limited. In Experiment 3, a secondary task technique was used to measure cognitive effort during the processing of important and unimportant information. Results showed that responses to secondary task probes were delayed more when important information was being processed. It is concluded that when there is no time pressure and subjects can allocate their processing time freely, they allocate extra time to more important stimuli. But when processing time is limited, extra cognitive effort can be allocated to accomplish the same result.

88-499 Bruck, Margaret and Waters, Gloria (McGill U.). An analysis of the spelling errors of children who differ in their reading and spelling skills. *Applied Psycholinguistics* (Cambridge), **9**, 1 (1988), 77-92.

Results of recent studies comparing the spelling errors of children with varying discrepancies between their reading and spelling skills have yielded conflicting results. Some studies suggest that good readers/poor spellers (mixed) are characterised by a set of deficits that differentiates them from poor readers/poor spellers (poor). Other studies fail to find differences between groups of poor spellers who differ in their reading skills. The present study attempted to determine the degree to which these discrepant results reflected differences in methods of subject selection and of error analysis. Two different sets of criteria were used to identify poor spellers/good readers. Subjects were selected on the basis of standardised reading comprehension and spelling test scores or on the basis of standardised single-

word-recognition and spelling-test scores. The phonetic accuracy of the spelling errors was assessed using two different scoring systems – one that took positional constraints into account and one that did not. In addition, children were identified at two different age levels, allowing for developmental comparisons. Regardless of age or reading ability, poor and mixed spellers had difficulty converting sounds into positionally appropriate graphemes. Only older children with good word recognition but poor spelling skills provided some evidence for a distinct subgroup of poor spellers. These children had relatively good visual memory for words and, unlike other poor spellers, showed relatively good use of rudimentary sound-letter correspondences.



88-500 Church, Kenneth W. (Bell Telephone Laboratories). Phonological parsing and lexical retrieval. *Cognition* (Lausanne), **25**, 1/2 (1987), 53-69.

Speech is a natural error-correcting code. The speech signal is full of rich sources of contextual redundancy at many levels of representation including allophonic variation, phonotactics, syllable structure, stress domains, morphology, syntax, semantics and pragmatics. The psycholinguistic literature has tended to concentrate heavily on high level constraints such as semantics and pragmatics and has generally overlooked the usefulness of lower level constraints such as allophonic variation. It has even been said that allophonic variation is a source of confusion or a kind of statistical noise that makes speech recognition that much harder than it already is. In contrast, this article argues that aspiration, stop release, flapping, palatalisation and

other cues that vary systematically with syllabic context can be used to parse syllables and stress domains. These constituents can then constrain the lexical matching process, so that much less search will be required in order to retrieve the correct lexical entry. In this way, syllable structure and stress domains are proposed as an intermediate level of representation between the phonetic description and the lexicon.

This argument is primarily a computational one and includes a discussion of a prototype phonetic parser which has been implemented using simple well-understood parsing mechanisms. No experimental results are presented.

88-501 Crain, Stephen and Nakayama, Mineharu (U. of Connecticut). Structure dependence in grammar formation. *Language* (Baltimore, Md), **63**, 3 (1987), 522-43.

A fundamental goal of linguistic theory is to account for language acquisition. At the heart of the problem is the poverty of the stimulus, which underdetermines the hypotheses that children formulate. Generative grammar proposes that the form for expressing rules is innately constrained, and one putative constraint is structure-dependence. This study subjected this proposal to an empirical test. In the first experiment, *yes/no* questions – amenable in principle to both structure dependent and structure-independent analyses – were elicited from thirty three- to five-year-old children. A second experi-

ment explored the nature of children's errors in Experiment 1. A third experiment contrasted a structurally-based account of the acquisition of interrogatives with one based on semantic generalisation. The results of these experiments support Chomsky's contention that children unerringly hypothesise structure-dependent rules. Moreover, it was found that the rules which children invoke are formally insensitive to the semantic properties of noun phrases – a finding that supports the developmental autonomy of syntax.

88-502 Harris, Margaret (Birkbeck Coll., U. of London) **and others.** Linguistic input and early word meaning. *Journal of Child Language* (Cambridge), **15**, 1 (1988), 77-94.

Four mother-child dyads were videotaped in a longitudinal study of the relationship between linguistic input to children and early lexical development. Diary records were also kept by the mothers and, together with the videorecordings, were used to identify the contexts in which the children produced their first words. These were compared with the contexts in which the mothers used these same words. It was found that there was a strong

relationship between the children's initial use of words and the most frequently occurring use of these words by the mothers. It was also found that although the majority of the children's first words were context-bound, a significant number were referential. The implications of these findings for current theoretical proposals concerning early lexical development are discussed.

88-503 Malakoff, Marguerite (Yale U.). The effect of language of instruction on reasoning in bilingual children. *Applied Psycholinguistics* (Cambridge), **9**, 1 (1988), 17-38.

The effect of language of instruction on verbal reasoning of balanced bilingual children was investigated. Subjects were 36 sixth-grade French-English bilinguals who were receiving primary instruction in either French or English. Eight types of verbal analogies were created by varying the language of the analogy stem (French or English), the language of the analogy solution (French or English), and level of difficulty (easy or hard). The primary analysis was conducted through ANOVA with programme type as between-subjects variable and item types as repeated measures factors. The results showed a significant interaction between language of instruction and language of presentation. In addition, there were different language effects for the two groups. The introduction of the non-

instructional language (French) had a significant effect on the mean response time of the English Language Programme Group at both levels of difficulty. The French Language Programme Group showed a more complex pattern of results: there was a statistically significant advantage for the All-English items as compared with the All-French items on the easy analogies but a trend towards poorer performance upon introduction of English on the hard analogies. These results are discussed in terms of the differences between the two groups of subjects and the effect of academic experience on language-related thought processes and fluency. The distinction between contextualised and decontextualised language is also discussed.

88-504 Nagata, Hiroshi (Okayama U., Japan). The relativity of linguistic intuition: the effect of repetition on grammaticality judgements. *Journal of Psycholinguistic Research* (New York), **17**, 1 (1988), 1-17.

Three experiments were performed to show the relativity of linguistic intuition in grammaticality judgements. In Experiment 1, 12 students judged the relative grammaticality of isolated sentences twice, receiving a repetition treatment between the two judgements. During the repetition phase, they were exposed to a repeated presentation of sentences. The findings show that the repetition treatment makes a judgement criterion more stringent for both grammatical and ungrammatical sentences. In Experiment 2, a release-from-the-proactive-inhibition paradigm was used. Twelve students first judged the grammaticality of the isolated sentences, then received the repetition treatment, and finally,

made a second judgement for the sentences embedded in context. No change in judgement criterion was found for the second judgement. Judgements of the ungrammatical sentences, when embedded in context, were found to be more lenient. In Experiment 3, 12 students judged sentences embedded in context. No change in judgement criterion was found. These findings are interpreted as suggesting that linguistic intuitions as revealed in grammaticality judgements are not absolute but relative in that they are easily influenced by repetition and other variables, such as embedded context.

88-505 Pinker, Steven (Massachusetts Inst. of Tech.) **and Prince, Alan** (Brandeis U.). On language and connectionism: analysis of a parallel distributed processing model of language acquisition. *Cognition* (Lausanne, Switzerland), **28**, 1/2 (1988), 73-193.

Does knowledge of language consist of mentally-represented rules? Rumelhart and McClelland have described a connectionist (parallel distributed processing) model of the acquisition of the past tense in English which successfully maps many stems onto their past tense forms, both regular (*walk/walked*) and irregular (*go/went*), and which mimics some of the errors and sequences of development of children. Yet the model contains no explicit rules, only a set

of neuron-style units which stand for trigrams of phonetic features of the stem, a set of units which stand for trigrams of phonetic features of the past form, and an array of connections between the two sets of units whose strengths are modified during learning. Rumelhart and McClelland conclude that linguistic rules may be merely convenient approximate fictions and that the real causal processes in language use and acquisition must be characterised

as the transfer of activation levels among units and the modification of the weights of their connections. The authors analyse both the linguistic and the developmental assumptions of the model in detail and discover that (1) it cannot represent certain words, (2) it cannot learn many rules, (3) it can learn rules found in no human language, (4) it cannot explain morphological and phonological regularities, (5) it cannot explain the differences between irregular and regular forms, (6) it fails at its assigned task of mastering the past tense of English, (7) it gives an incorrect explanation for two developmental phenomena: stages of overregularisation of

irregular forms such as *bringed*, and the appearance of doubly-marked forms such as *ated* and (8) it gives accounts of two others (infrequent overregularisation of verbs ending in *t/d*, and the order of acquisition of different irregular subclasses) that are indistinguishable from those of rule-based theories. In addition, many failures of the model can be attributed to its connectionist architecture. It is concluded that connectionists' claims about the dispensability of rules in explanations in the psychology of language must be rejected, and that, on the contrary, the linguistic and developmental facts provide good evidence for such rules.

88-506 Popiel, Stephen J. (Queen's U., Kingston, Ontario). Bilingual comparative judgements: evidence against the switch hypothesis. *Journal of Psycholinguistic Research* (New York), **16**, 6 (1987), 563-76.

The notion that bilinguals possess a language-switching mechanism was examined. Subjects made comparative judgements about concrete concept pairs (e.g. cow-panther) and abstract concept pairs (e.g. joy-sorrow), which were presented either unilingually or in mixed language. There was no significant difference in latencies for unilingual and

mixed language concept pairs, whether the pairs were concrete or abstract. The results substantiate neither the general switch hypothesis nor the notion that between-language and within-language associative networks have different transition probabilities.

88-507 Reagan, Robert Timothy (Harvard U.). The syntax of English idioms: can the dog be put on? *Journal of Psycholinguistic Research* (New York), **16**, 5 (1987), 417-41.

An idiom is a collection of words whose meaning as a whole cannot be determined from the meanings of the individual words. As such, idioms pose a problem for the psychological process of interpretation, but psychologists have shown interpretation of idioms to be fast. A hallmark of idioms is their resistance to syntactic variation, and some idioms are more resistant than others. Idioms that are low in resistance are termed 'flexible', and they tend to be more familiar to users of the language, combined $r = 0.401$, combined $P = 0.02$. some syntactic variations are more *disruptive* than others are, and the

disruptiveness of variations agrees well with a prediction by Fraser (1970), combined $r = 0.897$, $P < 0.01$. Furthermore, 86% of the judgements of the acceptability of 41 idioms in 7 to 8 syntactic variations by 103 Harvard undergraduates agree with a strong proposal by Fraser (1970) that if a particular syntactic variation of an idiom is acceptable, then all relevant variations equally or more disruptive are also acceptable. The localisation of the 14% disagreement in either competence or performance will have considerable implications for cognitive psychology and linguistics.

88-508 Stemberger, Joseph Paul (U. of Minnesota). Between-word processes in child phonology. *Journal of Child Language* (Cambridge), **15**, 1 (1988), 39-61.

Most processes in child phonology have as their domain a single word or a smaller chunk of phonological material. Processes that involve the interaction of two or more words have never been examined. In a diary study of the speech of one child

acquiring English, there were eight between-word processes. All were optional and occurred in fairly restricted environments. Most of the processes were of short duration. Consequences for the study of child phonology are discussed.

88-509 Stuckenberg, Annette and O'Connell, Daniel C. The long and short of it: reports of pause occurrence and duration in speech. *Journal of Psycholinguistic Research* (New York), **17**, 1 (1988), 19-28.

Native speakers of American English and of German listened to a passage several minutes in duration in each language and reported occurrence and duration of pauses. Subjects overestimated occurrence (false positives) and underestimated duration. Overall analyses of variance indicated that Germans reported a higher percentage of pauses than Americans; that a higher percentage of pauses was reported in native than in non-native passages; that Americans reported a higher percentage of pauses in English passages, whereas Germans' percentages were the same in both languages; that American women reported more false positives

than American men, whereas German men reported more than German women; and that Americans and Germans both reported more false positives in English than in German. Detailed analyses of the individual passages yielded reliable differences between Germans and Americans in their reports of pauses in three duration brackets: = 0.3; > 0.3, < 1.0; = 1.0 sec. Pause reports of this kind diverge from objectively measured pause data as a function of a number of independent variables and are therefore not to be trusted as objective estimates of either pause occurrence or pause duration.

88-510 Titone, Renzo (U. of Rome). Early bilingual reading: psycholinguistic theory and research. *AILA Review* (Madrid), **3** (1986), 24-36.

The author considers the theoretical aspects of early bilingual reading (EBR) in terms of the relationship between bilingualism and intelligence, reading acquisition and basic education. Findings appear to confirm that 'balanced' (i.e. fully) bilingual children demonstrate increased metacognitive/metalinguistic abilities, which in turn lead to higher levels of academic achievement. In addition, the development of the intellectual ability to reflect consciously upon and manipulate thought processes and language concepts/functions also leads to enhanced reading skill. In a more holistic sense too, EBR can become the mainspring of all-round personality formation, since knowledge of two languages possibly implies the ability to appreciate, and to

behave appropriately in, culturally diverse situations.

Case studies of early bilingual readers (e.g. Anderson, 1981) as well as the claims made by Doman (1964) for L1 reading acquisition reveal that children can learn to read from the age of three and that efficacious reading instruction can be implemented even in kindergarten settings. The author describes his own research and teaching materials, which aim to explore such factors as the feasibility/effectiveness of simultaneous L1/L2 learning before the age of six and the correlation between EBR and the overcoming of the cognitive and linguistic disadvantages purportedly evinced by lower class or immigrant children.

88-511 Hovy, Eduard (Information Sciences Inst., Marina del Rey, Ca). Generating natural language under pragmatic constraints. *Journal of Pragmatics* (Amsterdam), **11**, 6 (1987), 689-719.

Though much work in natural language generation remains to be done with regard to syntax, the main stumbling block that prevents existing generators from easily producing coherent paragraphs is our lack of understanding of text planning. To remedy this, we should view generations pre-eminently as a planning task; that is, we should study the goals that underlie text production, the plans that help achieve these goals, and the ways the plans can interact with grammar. A clue to the nature of these goals is the fact that people say the same thing in various ways. They can vary the content and form of their text when they want to convey more information than is contained in the literal meanings of their words.

This information expresses the speaker's interpersonal goals toward the hearer and, in general, his perception of the pragmatic aspects of the conversation. This paper identifies goals that arise from pragmatic aspects of the conversation, plans and strategies to achieve them, and how they constrain the decisions a generator has to make during the realisation process. To illustrate some of these ideas, a computer program is described which produces stylistically appropriate texts from a single representation under various settings that model pragmatic circumstances.

88-512 Jose, Paul E. (Loyola U. of Chicago, Ill). Sequentiality of speech acts in conversational structure. *Journal of Psycholinguistic Research* (New York), **17**, 1 (1988), 65-88.

One aspect of the phenomenon of coherence in conversational discourse was addressed in the present study: sequentiality of speech acts. Several models of discourse structure have postulated sequencing rules between speech acts in conversations, but these efforts have been hampered by the lack of an efficient empirical method that can characterise a large body of language data. The lag sequential technique is proposed here as a tool that can be used to abstract a 'grammar' of speech act contingency

from spoken discourse. Derived patterns of discourse between female adults and preschool children confirmed expectations that most discourse is based upon three fundamental speech act pairings: question-answer, statement-reply, and directive-acknowledgement. It was also found that interlocutor differences in status, knowledge, and conversational ability affected the structure of the discourse in predictable ways.

88-513 Liles, Betty Z. and Purcell, Sherry (U. of Connecticut). Departures in the spoken narratives of normal and language-disordered children. *Applied Psycholinguistics* (Cambridge), **8**, 2 (1987), 185-202.

The spoken narratives of 38 normal and language-disordered children (CA 7;6-10;6) were analysed by describing their departures from the original text during recall. The narrative texts were presented to an adult listener following each child's viewing of a 35-minute film. The following departure types were compared across groups: (a) acceptable departures from the original text meaning, (b) unacceptable departures from the original text meaning, (c) grammatical departures (i.e. agrammatical utterances), (d) exact repetitions of words or phrases, (e) unacceptable departures from the text's meaning correctly repaired, (f) unacceptable departures from the text meaning incorrectly repaired, (g)

departures from text meaning left unrepaired, and (h) repaired grammatical departures. Results indicated that both groups used a higher rate of acceptable departures from the original text meaning than any other departure type, with the normal children producing a higher rate of acceptable departures and a lower rate of unacceptable grammatical departures. Both groups repaired fewer unacceptable grammatical departures than unacceptable departures from text meaning. The groups did not differ in their tendency to ignore grammatical departures. Implications for language processing in narrative discourse are discussed.

88-514 Marmaridou, A. Sophia S. Semantic and pragmatic parameters of meaning: on the interface between contrastive text analysis and the production of translated texts. *Journal of Pragmatics* (Amsterdam), **11**, 6 (1987), 721-36.

This paper argues for the view that the sociolinguistic operations and procedures required for recording a source text A into a target text B must relate to semantico-pragmatic, language neutral parameters of meaning that become apparent when contrasting semantically and pragmatically equivalent texts. The data collected for experimental investigation consisted of a set of announcements, delivered in Greek and in English to passengers on board an aircraft and assumed to be semantically, pragmatically and functionally equivalent within the respective sociocultural frames.

A contrastive analysis of these pairs of texts indicates that the semantic-pragmatic parameters of meaning affecting the orientation of encoded messages in the particular discourse type in the two languages appear as binary distinctions between

addressee and speaker, transaction participant and transaction setting, personal direct reference and impersonal indirect reference, cause and effect, etc. The view may thus be entertained that the conceptual framework accounting for sociolinguistic appropriateness is identical to that accounting for linguistic meaning and discourse organisation. As regards the contrastive analysis of texts, it is proposed that, once identified, such parameters of meaning can constitute a language neutral *tertium comparationis* at the level of discourse. Also, in relation to the production of translated texts, such parameters may serve to focus the translator's attention on those aspects of the message whose transfer to another language requires some kind of negotiation between two different sociocultural frames.

88-515 Ricento, Thomas Clausal ellipsis in multi-party conversation in English. *Journal of Pragmatics* (Amsterdam), **11**, 6 (1987), 751-75.

Researchers in discourse and grammar, e.g. Givón, have identified the clause (verb plus any arguments) as the minimal unit of discourse. However, an analysis of conversational data reveals a relatively high percentage of 'verbless' units which occupy conversational turns and have semantic content, which would not be accounted for in the 'verb plus

any arguments' definition. This paper proposes a methodology to account for these units both grammatically and functionally. It also demonstrates that the occurrence and frequency of elliptical clauses is strongly correlated with patterns of turn-taking in conversations in which four or more interlocutors participate.

88-516 Rounds, Patricia L. (U. of Oregon). Characterising successful classroom discourse for NNS teaching assistant training. *TESOL Quarterly* (Washington, DC), **21**, 4 (1987), 643-71.

As the number of foreign-born graduate students in American universities has risen over the past few years, a steadily increasing proportion of undergraduate education, especially in large public universities, has come into the hands of non-native-speaking (NNS) teaching assistants who have limited English proficiency. Although ESL teachers and researchers have recently begun to design training programmes suited to the special needs of the NNS graduate student teaching assistant, these programmes are most frequently based on general-purpose language-learning materials. The sugges-

tions offered in this article for a more specific-purpose model of instruction are based on a quantitative and qualitative discourse analysis of a corpus of videotapes of native speakers and NNSs teaching university-level mathematics classes. This analysis and the researcher's own experience as a mathematics teacher were used to develop a characterisation of what constitutes teaching discourse that is communicatively competent for mathematics, related disciplines, and perhaps other educational contexts as well.

88-517 Selting, Margret. Descriptive categories for the auditive analysis of intonation in conversation. *Journal of Pragmatics* (Amsterdam), **11**, 6 (1987), 777-91.

A system of descriptive categories for the notation and analysis of intonation in natural conversation is presented and discussed in relation to other systems currently suggested for incorporation in discourse analysis. The categories are based on purely auditive criteria. They differ from e.g. tonetic approaches by relying more on transcribers' and analysts' perception of the form and internal cohesiveness of contours, especially with respect to rhythmicality and/or pitch contour (*gestalt*). Intonation is conceived of as a relational phenomenon; the role of intonation in conversational utterances can only be analysed by considering its co-occurrence with

other properties of utterances like syntactic, semantic and discourse organisational structures and devices. In general, intonation is viewed as one signalling system contributing to the contextualisation of utterances in their conversational context. A broad functional differentiation between different types of intonation categories seems plausible: local categories like accents might fulfil mainly semantic functions, while global categories like different contour types might fulfil primarily functions with respect to the interactive co-ordination of activities in conversation.

88-518 Wilson, Thomas P. and Zimmerman, Don H. (U. of California, Santa Barbara). *Discourse Processes* (Norwood, NJ), **9**, 4 (1986), 375-90.

Turn-taking is a fundamental structural feature of social interaction. Three major approaches to describing turn taking have emerged: stochastic,

signalling, and sequential-production models. The first two treat silences between speakers as simple response latencies, whereas the third views silence as



generated collaboratively by the parties to the conversation. The simple response–latency interpretation predicts a distribution of between-turn silences that declines monotonically with duration, whereas the sequential-production model predicts a periodic pattern of peaks and valleys, with an overall decline in the heights of the peaks as

duration increases. Analysis of the frequency distributions of durations of silences between speakers in two-party conversations finds the periodic structure predicted by the sequential-production model. The finding is interpreted as supporting a view of social interaction as a fundamentally collaborative activity.