

## Linguistic theory

**91–364 Hickmann, Maya and Liang, James.** Clause-structure variation in Chinese narrative discourse: a developmental analysis. *Linguistics* (Amsterdam), **28**, 6 (1990), 1167–200.

This paper examines some functional determinants of clause-structure variation in narratives produced by Chinese adults and four- to ten-year-old children, with particular attention to the dichotomy between referent introductions and reference maintenance. The aim is to determine whether and how the distinction between new and old information determines the uses of linguistic devices during the course of children's development. The analyses focus on the use of word order versus NP types, given that new referents must be introduced in Chinese by means of clause structure (obligatory postverbal position), whereas oppositions among

NP types are optional. It is shown that the Chinese adults mark newness maximally by means of both NP types and clause structure. The Chinese children at first rarely mark newness in any way, and, although they make an increasing use of both NP types and structural variations, they do not rely on word order as much as the adults even at ten years. These results are discussed in light of a comparable data base in English, French, and German. Several cognitive and pragmatic factors are proposed to account for the observed similarities and differences in how children acquire discourse devices across these languages.

**91–365 Maratsos, Michael.** Are actions to verbs as objects are to nouns? On the differential semantic bases of form, class, category. *Linguistics* (Amsterdam), **28**, 6 (1990), 1351–79.

In most extant theories of form-class acquisition, the relationship between the semantic and formal properties of each class is held to be similar. This paper presents arguments that this relationship is in fact different for nouns than for any other lexical class. The semantic notion of concrete object reference functions both as an entrée into the category and subsequently as the core which holds this category together, as its subclasses admit of no unified structural description. The basic categorial split in the world's languages is between 'noun' and 'other'. Children cannot initially assume that the notions 'action', 'stative property', 'locative relation' will provide entries into the categories verb, adjective, preposition, respectively, first because these categorial distinctions are not universally

attested, and second because in those languages that do have them, there is a much looser fit between notion and category. For verbs, for example, small-scale combinatorial properties provide a more reliable characterisation than 'action'. It is further argued that a semantic-structural characterisation of noun as 'head of argument phrase' provides the child with a less effective entry into the category: not all arguments are noun-headed, and conversely, nouns head constructions which do not function as arguments. In sum, the relationship between the category noun and its semantic characterisation is special. The paper concludes with a critique of a previous model of form-class acquisition (Maratsos and Chalkley, 1980) in the light of the arguments presented here.

## Phonetics and phonology

**91–366 Ladefoged, Peter** (U. of California, Los Angeles). Some reflections on the IPA. *Journal of Phonetics* (London), **18**, 3 (1990), 335–46.

This paper is a commentary on both the newly revised International Phonetic Alphabet, and on the 1989 Kiel Convention of the International Phonetic Association at which it was produced. The new IPA chart is examined, and the pragmatic but conservative attitudes of the Association are described. It is shown that the IPA has a phonological basis, and that IPA transcription has two parts: a text

containing IPA symbols, and a set of conventions (rules) for interpreting the symbols. The paper concludes with a personal view of the problems of whether there is a finite set of speech sounds, and whether a sound in one language can be equated with one in another, suggesting that for the phonetician there is no universal truth independent of the observer.

## Sociolinguistics

**91-367 Lawrence, Samuel G. and others.** (U. of Georgia). The effects of sex dialects and sex stereotypes on speech evaluations. *Journal of Language and Social Psychology* (Clevedon, Avon), **9**, 3 (1990), 209–24.

Two studies examined the effects of male and female 'dialects' and sex stereotypes on speech evaluations. Although sex-linked language effects have explained more evaluative variance than stereotypes, the persistence of these effects across a range of conversational contexts is uncertain. Study 1 supported the dialect hypothesis across two stimulus conversations but did not support the stereotype hypothesis. Study 2 found dialect and stereotype effects to be conversation-specific. Men's

speech was rated higher in dynamism and socio-intellectual status than women's speech in only one of four conversations. Attributed male speakers were rated as more dynamic than attributed female speakers in two work settings. The conversation-specific nature of dialect and stereotype effects suggested a reconceptualisation of men's and women's speech as interactional achievements and a need for research on contextual cues in work environments that evoke stereotyping.

**91-368 Marriott, Helen.** The development of Japanese business communication research. *UNESCO ALSED-LSP Newsletter* (Copenhagen, Denmark), **13**, 3 (1991), 12–28.

In the past, the teaching of business English, in particular in Australian–Japanese contact situations, has been unsatisfactory. Some of the work has been of interest, but frequently it has used questionable sources, often based on attitudinal rather than actual data, or it has been anecdotal. However, a considerable body of research has been amassed at Monash University, especially following a six months stay in Japan by fourth-year students.

These studies on communication problems include a wide range of research papers on social and

work interaction and sociocultural and socio-economic communicative competence. The research has led to the development of methodology involving interview techniques and use of audio and video recordings. Sociocultural differences have been highlighted such as Australian informality compared with Japanese lack of involvement in conversations, and socio-economic diversity with Japanese attention to detail and management of tasks in sequential rather than simultaneous order.

**91-369 Stevenson, Patrick** (U. of Southampton). Political culture and intergroup relations in plurilingual Switzerland. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **11**, 3 (1990), 227–55.

Switzerland is widely ignored in the literature on multilingualism unless it is merely cited as an exemplary model of successful cohabitation and conflict management. This article argues that this image gives a misleadingly static impression of harmonious inter-cultural relations and that as a result little attention has been paid to the nature and extent of multilingual and multicultural devel-

opment within the federation. These issues are discussed against the background of recent research into language contact and diversity in Switzerland, in an attempt to contribute to a more sharply focused analysis of some of the linguistic and cultural problems and paradoxes in this highly complex society.

**91-370 Thieberger, Nicholas.** Language maintenance: why bother? *Multilingua* (Amsterdam), **9**, 4 (1990), 333–58.

What do we mean by 'language maintenance'? It is an enterprise that, understandably, has the support of most linguists, but for what reasons, and to what possible outcome? There are at least seven arguments used in defence of the effort placed on 'maintaining'

Australian Aboriginal languages, and these are discussed and evaluated in this paper. While each has merit, it is ultimately by appeal to morality and social justice that we find justification for Aboriginal language maintenance.



## Psycholinguistics

**91-371 Boscolo, Pietro** (U. of Padua, Italy). The construction of expository text. *First Language* (Chalfort St. Giles, Bucks), **10**, 3 (1990), 217-30.

The aim of this study is to analyse the ways in which elementary school children construct an expository text, i.e. a text whose primary objective is to express information and ideas and which is well exemplified in school textbooks. Eighty subjects from grade 2 to 8 were requested to write a text about the wind. The writing task was divided into two main phases: in the first phase each subject dictated his/her ideas to an adult who transcribed them; in the second

phase the subject had to write a text using the ideas he/she had expressed. The data showed a developmental trend in expository writing, which concerns particularly three aspects of the written productions: the strategies of content generation used by the subjects, the changes from dictation to text production, and the organisation of the final text.

**91-372 Bowerman, Melissa.** Mapping thematic roles onto syntactic functions: are children helped by innate linking rules? *Linguistics* (Amsterdam), **28**, 6 (1990), 1253-89.

In recent theorising about language acquisition, children have often been credited with innate knowledge of rules that link thematic roles such as agent and patient to syntactic functions such as subject and direct object. These rules form the basis for the hypothesis that phrase-structure rules are established through 'semantic bootstrapping', and they are also invoked to explain the acquisition of verb subcategorisation frames (for example, Pinker, 1984). This study examines two versions of the hypothesis that linking rules are innate, pitting them against the alternative hypothesis that linking patterns are learned (as proposed, for example, by Foley and Van Valin, 1984). The first version specifies linking rules through paired thematic-syntactic role hierarchies, and the second char-

acterises them as a function of verb semantic structure. When predictions of the two approaches are drawn out and tested against longitudinal spontaneous speech data from two children learning English, no support is found for the hypothesis that knowledge of linking is innate; ironically, in fact, the children had more trouble with verbs that should be easy to link than with those that should be more difficult. In contrast, the hypothesis that linking rules are learned is supported: at a relatively advanced age, the children began to produce errors that are best interpreted as overregularisations of a statistically predominant linking pattern to which they had become sensitive through linguistic experience.

**91-373 Bruck, Maggie and Waters, Gloria** (McGill U.). Effects of reading skill on component spelling skills. *Applied Psycholinguistics* (Cambridge), **11**, 4 (1990), 425-37.

This study examined the influence of reading experience on the development of component spelling skills. Three groups of sixth-grade children were identified - good readers-good spellers (Good), good readers-poor spellers (Mixed), and poor readers-poor spellers (Poor). The children completed three different spelling tasks that assessed component spelling skills involving the use and knowledge of sound-spelling, orthographic, morphological, and visual information. Good subjects performed consistently better than Mixed and Poor

subjects. Mixed and Poor subjects did not differ on measures requiring use and knowledge of sound-spelling, orthographic, and visual information. Mixed subjects performed better than Poor subjects on measures assessing use and knowledge of morphological information. It is suggested that, as a result of their greater experience with print, Mixed subjects have better knowledge of some of the linguistic, but not the visual, characteristics of words.

**91-374 Clark, Eve V.** Speaker perspective in language acquisition. *Linguistics* (Amsterdam) **28**, 6 (1990), 1201-20.

When speakers decide to represent an event linguistically, they often have to choose among available words and constructions. Their language offers more than one conventional means for representing that event. Such options allow speakers to take different perspectives on the event, and to indicate what their perspective is on that occasion, to their addressees. In acquiring a language, then, children must learn how specific choices in a language

incorporate speaker perspective as part of the meaning being expressed. Speaker perspective can be marked in lexical and constructional choices as well as in deictic choices. It can also be marked in verbs through choices of transitivity, voice, or aspect. This paper reviews some of the research on acquisition pertinent to the linguistic representation of speaker perspective.

**91-375 Duffy, Susan A.** (Amherst Coll.) and **Rayner, Keith** (U. of Massachusetts, Amherst). Eye movements and anaphor resolution: effects of antecedent typicality and distance. *Language and Speech* (Hampton Hill, Mddx), **33**, 2 (1990), 103-19.

The coordination of the eye movement control system with comprehension processes was studied. Eye movements were monitored while subjects read paragraphs containing an anaphoric noun phrase. In Experiment 1, fixations on the anaphoric noun were shorter when its antecedent was close and typical of the noun category than when it was distant and/or atypical. Subjects took longer reading the words following the anaphoric noun when the antecedent was atypical than when it was typical. In Experiment

2, distance of antecedent affected anaphor fixation times for category name anaphors but not for general noun anaphors (e.g. 'object'). The results suggest that the eyes do not wait for the completion of anaphor resolution processes. Rather, these processes are completed after the eyes have left the anaphoric noun. The different patterns of effects on the anaphores themselves and the post-anaphor region were interpreted to reflect two different stages in anaphor resolution.

**91-376 Goldfield, Beverly A.** (Connecticut Coll., Ct.). Pointing, naming, and talk about objects: referential behaviour in children and mothers. *First Language* (Chalfont St. Giles, Bucks), **10**, 3 (1990), 231-42.

This study investigates the relationship of children's communicative pointing and maternal language to the child's acquisition of object labels. Ten children with a high proportion of nouns (a High Referential group) were matched for vocabulary level with 10 children with fewer nouns and a more varied lexicon (a Low Referential group). The frequency of children's communicative pointing during play and the proportion of maternal talk used to label and describe objects during independent observations of mother-child interaction were coded from videotaped observations at 14 and 20 months.

At 14 months there were no differences between the two groups in either pointing or maternal

language. Both communicative pointing and maternal talk about objects, however, increased significantly for the High Referential group at 20 months. At 20 months, children in the High Referential group pointed out objects to their mothers more than three times as often as children in the Low Referential group. There was no change over time in communicative pointing and maternal talk about objects for children and mothers in the Low Referential group. At 20 months, there was a significant positive correlation between communicative pointing and maternal talk about objects for children in the High Referential group.

**91-377 Gómez-Fernández, Domingo E. and others** (U. of Santiago de Compostela, Spain). The differential evaluation of psycholinguistic abilities of bilingual children. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **11**, 3 (1990), 191-7.

The Illinois Test of Psycholinguistic Abilities (ITPA) was given to 46 bilingual and 38 monolingual

children in order to determine if there are differences in the performance on the subtests and on the global

ITPA between both groups of children. These groups were matched for age and intelligence. The performance of the bilingual children was significantly inferior in tests of the visual-motor channel:

they also performed badly on the analogous auditory-vocal tests, and were also significantly lower at the representative level.

**91-378 Plunkett, Kim** (U. of Aarhus, Denmark) **and Marchman, Virginia** (U. of California, San Diego). U-shaped learning and frequency effects in a multi-layered perceptron: implications for child language acquisition. *Cognition* (Lausanne), **38**, 1 (1991), 43-102.

A three-layer back-propagation network is used to implement a pattern association task in which four types of mapping are learned. These mappings, which are considered analogous to those which characterise the relationship between the stem and past tense forms of English verbs, include arbitrary mappings, identity mappings, vowel changes, and additions of a suffix. The degree of correspondence between parallel distributed processing (PDP) models which learn mappings of this sort and children's acquisition of inflectional morphology has recently been at issue in discussions of the applicability of PDP models to the study of human cognition and language. In this paper, the authors explore the capacity of a network to learn these types of mappings, focusing on three major issues. First, they compare the performance of a single-layered perceptron similar to the one used by Rumelhart and McClelland with a multi-layered perceptron. The results suggest that it is unlikely that a single-layered perceptron is capable of finding an adequate solution to the problem of mapping stems and past tense forms in input configurations that are sufficiently analogous to English.

Second, they explore the input conditions which determine learning in these networks. Several factors

that characterise linguistic input are investigated: (a) the nature of the mapping performed by the network (arbitrary, suffixation, identity, and vowel change); (b) the competition effects that arise when the task demands simultaneous learning of distinct mapping types; (c) the role of the type and token frequency of verb stems; and (d) the influence of phonological subregularities in the irregular verbs. Each of these factors is shown to have selective consequences on both successful and erroneous performance in the network.

Third, the authors outline several types of systems which could result in U-shaped acquisition, and discuss the ways in which learning in multilayered networks can be seen to capture several characteristics of U-shaped learning in children. In general, those models provide information about the role of input in determining the kinds of errors that a network will produce, including the conditions under which rule-like behaviour and U-shaped learning will and will not emerge. The results from all simulations are discussed in light of behavioural data on children's acquisition of the past tense and the validity of drawing conclusions about the acquisition of language from models of this sort.

**91-379 Pye, Clifton.** The acquisition of ergative languages. *Linguistics* (Amsterdam), **28**, 6 (1990), 1291-330.

Ergative languages have challenged the ingenuity of linguists for more than a century. This article explores learnability problems associated with the acquisition of ergative languages. Traditionally, an ergative language is one which treats the subjects of intransitive verbs in the same way as the objects of transitive verbs. Languages may have rules which operate on a morphologically or syntactically ergative basis, but all languages are syntactically accusative to some extent. Both types of ergativity raise problems for language-acquisition theory. Children acquiring ergative morphologies must learn to distinguish between the subjects of transitive and intransitive verbs. Acquisition data suggest that children acquire ergative and accusative morphological systems equally easily. This finding supports a distributional learning procedure. Learnability

considerations rule out the existence of syntactically ergative languages in the sense of Marantz's (1984) ergativity hypothesis. Unambiguous evidence of syntactic ergativity only appears in complex sentences; thus, children cannot use data within simple, active sentences to establish whether or not their language is syntactically ergative. Children acquiring languages with ergative syntactic constructions must learn when the direct object of a transitive verb functions as a syntactic pivot. Acquisition data for ergative syntactic constructions in K'iche' and Kaluli suggest that children initially fail to recognise ergative constraints on syntactic rules. This finding supports semantic bootstrapping as an acquisition mechanism for the initial construction of syntactic structure.

**91-380 Robinson, Peter J.** (U. of Hawaii at Manoa). Metaphors for the description of acquisition data: from constituency 'trees' to dependency 'frames'. *IRAL* (Heidelberg, Germany), **28**, 4 (1990), 273-92.

This article chronicles the renewed interest in the role of lexis in language learning/teaching, supporting the claims of 'frame theory', i.e. that the word is the optimum linguistic unit. Grammar is not the 'head', with words in a dependent position nor is linguistic skill only a structural competence which is filled out lexically at a later stage. Rather, 'little needs to be stipulated beyond lexical meaning'. The study of acquisition of structure via lexis has been delayed, apparently, by the primacy of constituency theory, whereby language is seen to be structured hierarchically; a succession of nodes is gradually broken up, or filled, by smaller units such as Verb and Noun Phrases, until the level of the word is reached [examples]. In the latter case,

'competence' is predominantly seen as synonymous with an idealised knowledge of syntax and grammatical rules into which words slot.

The constituency position is undercut by, for example, Sinclair's 'naturalness'/'well formedness' distinctions, and by the seeming prevalence of ready-made, memorised expressions (e.g. idioms and 'sentence stems') in oral discourse. The restrictions on sounding 'natural' are seemingly as fundamental as abstract hypotheses about what is well formed for the linguist. Perceived dependencies between lexical items leads the L2 speaker to generalise/hypothesise, and then to substitute items in frames to see if they are acceptable to an interlocutor in either mode.

**91-381 Segalowitz, Norman and Hébert, Martine** (Concordia U.). Phonological recoding in the first and second language reading of skilled bilinguals. *Language Learning* (Ann Arbor, Mich), **40**, 4 (1990), 503-38.

This study investigated phonological recoding in reading by highly skilled English and French bilinguals. Bilinguals with approximately equal reading rates in their first (L1) and second (L2) languages and bilinguals with significantly slower rates in L2 than in L1 participated in lexical decision and sentence verification tasks in each language with stimuli designed to assess sensitivity to the phono-

logical properties of words. The results suggested that: (1) in general, slow L2 readers were not more dependent upon phonological recoding than were fast L2 readers; (2) for slow readers, L2 presented a heavier processing load in working memory than it did for fast readers; and (3) there exist different phonological effects specific to English and French.

## Pragmatics

**91-382 Carroll, Mary.** Word order in instructions in learner languages of English and German. *Linguistics* (Amsterdam), **28**, 5 (1990), 1011-37.

The present study examines the development of word order in adult learner languages from a point of view which focuses on how language is used in context to achieve a specific purpose. The description of development deals with the question as to how semantic, pragmatic, and syntactic principles of organisation can account for the orders observed in early and intermediate phases of acquisition.

The findings are discussed in terms of the limits of

linguistic and communicative factors as the sole determinants of the process of development. The specification of these factors alone cannot account for all patterns observed. Linguistic factors can be seen to interact with determinants at other cognitive levels of organisation, and further research is required on how this interaction is controlled in language development.

**91-383 Frank, Jane.** You call that a rhetorical question? Forms and functions of rhetorical questions in conversation. *Journal of Pragmatics* (Amsterdam), **14**, 5 (1990), 723-38.

The rhetorical tactic of 'posing questions that expect no answer' is historically well known to be an effective persuasive device, and one which influential speakers continue to use today. However, while

skilled communicators acknowledge the strategic effectiveness of rhetorical questions in affecting interactive outcomes, and most English speakers can supply examples on demand, a review of the literature suggests that this interrogative form is as difficult to define as it is communicatively successful. This paper explores some of the limitations of traditional Speech Act Theory, and contemporary extensions of this theoretical framework, when dealing with the purposes served by rhetorical questions. Using examples excerpted from three different sets of naturalistic data, the author shows how the pragmatic complexity inherent in rhetorical

questions, given their diverse and imprecise definition, contributes to the difficulty in their identification and interpretation as indirect speech acts. These problems may be illuminated, but incompletely resolved, by using concepts and methods drawn from discourse analysis. Based on an analysis of the data, it is tentatively concluded that these approaches, even if used in combination and augmented by the insights of cognitive psychology, are insufficient to identify and explain the multiple communicative functions of rhetorical questions in spontaneous conversation.

**91-384 Fraser, Bruce** (Boston U., MA). An approach to discourse markers. *Journal of Pragmatics* (Amsterdam), **14**, 3 (1990), 383-95.

Discourse markers are expressions such as *now, well, so, however* and *then*, which signal a sequential relationship between the current basic message and the previous discourse. The purpose of this paper is to propose that discourse markers be considered a well-defined pragmatic category within the grammar of a language.

A framework for sentence meaning is presented within which discourse markers are analysed as a class of commentary pragmatic markers. The claim

that marker meaning is that of the expression when used as part of sentence content (e.g., as an adverbial) is rejected, and a minimal pragmatic core meaning for each discourse marker is proposed. Finally, discourse markers are distinguished from other types of commentary markers, from vocatives, interjections, and from expressions such as *oh, y'know, I mean* and *because*, often treated as a part of this group.

**91-385 Goldberg, Julia A.** (U. of Wyoming). Interrupting the discourse of interruptions: an analysis in terms of relationally neutral, power- and rapport-oriented acts. *Journal of Pragmatics* (Amsterdam), **14**, 6 (1990), 883-903.

Analysts interested in the social significance of conversational behaviour have traditionally treated interruptions as reliable, objective indicators of the interlocutors' power, control or dominance. The relational significance interruptions have for the participants themselves, however, was rarely considered. Recently, researchers have become in-

creasingly aware that interruptions are not and need not be synonymous with power. This paper attempts to differentiate between power and non-power interruptions. It provides a means for assessing the 'meaning' of each interruption as a display of relational power or rapport, or as a non-relational display of 'neutrality'.

**91-386 Maynard, Senko K.** Conversation management in contrast: listener response in Japanese and American English. *Journal of Pragmatics* (Amsterdam), **14**, 3 (1990), 397-412.

This paper proposes a methodological framework, C(ontrastive) C(onversation) A(nalysis) within which some of the listener back-channel expressions in Japanese conversation are analysed in contrast with those observed in American English. Back-channel expressions examined are limited to *uh-huh*'s and the like, brief comments, punctuated head movements and laughter.

After analysing data consisting of 40 dyadic casual conversations videotaped in Japan and the United States, it is concluded that in Japanese casual

conversation, listener's response such as brief comments and head movements occur far more frequently than in comparable American situations. Relevant contexts for listener back-channels in each speech community are found to differ significantly. In Japanese, grammatical completion, sentence-final particles and speaker's vertical head movement provide the relevant context while in English grammatical completion provides the single most significant context.

The results of the contrastive study are evaluated

and assessed in light of the potential problems of CCA, with the issue of 'equivalence' being the most serious and problematic. Additionally, as a step beyond CCA, four intercultural conversations by American and Japanese speakers are examined.

**91-387 Redeker, Gisela** (Tilbury U., The Netherlands). Ideational and pragmatic markers of discourse structure. *Journal of Pragmatics* (Amsterdam), **14**, 3 (1990), 367-81.

This paper presents an integrative approach to the study of discourse coherence which follows the observation of Bühler and others that language use always involves both the representation of propositional content and the expression of attitudes and intentions. Consideration of only one of these functions is shown to be insufficient for an adequate account of discourse coherence.

Coherence is regarded as arising from semantic relations between the ideas stated and pragmatic relations between the actions performed in speaking or writing. Empirical evidence for this view is provided by the use of pragmatic and ideational

structuring devices in film descriptions. Speakers who were describing a film to a friend used more markers of pragmatic structure than those whose listener was a stranger. At the same time, they were less explicit in indicating the ideational structure of their discourse. This trade-off between pragmatic and ideational structuring occurred not only in dialogues (two-way auditory channel), where the friends gave more feedback, but also in monologues (one-way channel), where the two conditions differed only in the speaker's knowledge that the listener was a friend or a stranger.

**91-388 Schmitt, Reinhold.** 'So so, ganz fremde Leute stehen da': Sprachverwendung und soziale Bedeutung in Situationseröffnungen. [Language use and social meaning in opening remarks.] *Deutsche Sprache* (Berlin, Germany), **18**, 4 (1990), 289-309.

Two things can be shown on the basis of opening remarks of a member of a group of regular kiosk customers: firstly that a large part of the communicative repertoire used by the customer during his stay at the kiosk is to be found in his opening remarks. This leads to the conclusion that from the perspective of structural analysis opening remarks

represent 'microstructural concentrations' of overall behaviour. Secondly, an analysis of these communicative forms shows the importance this customer attaches to his visits to the kiosk. The reconstruction of his communicative behaviour and the meaning it expresses are combined in the concept of 'Präsenzfigur'.

**91-389 Sinclair, Anne and van Gessel, Ruth** (U. of Geneva, Switzerland). The form and function of questions in children's conversations. *Journal of Pragmatics* (Amsterdam), **14**, 6 (1990), 923-44.

The children's questions analysed here were taken from a corpus of spontaneous conversations between several French-speaking children aged 3;0 to 4;10 in a day-care centre during 'free play' time. The form of their questions is described and a classifi-

cation of their function is presented. The results of these two classifications are laid out in a double-entry table, which permits a discussion of the form-function mapping issue.