

# Research in the supporting sciences

## Sociolinguistics

- 94-324 Bloome, David** (U. of Massachusetts). The social construction of intertextuality in classroom reading and writing lessons. *Reading Research Quarterly* (Newark, Del), **28**, 4 (1993), 305–33.

Intertextuality is not given in a text or in a reader, but is rather socially constructed. As people act and react to each other, they use language and other semiotic systems to make meaning, to constitute social relationships, and to take social action. In order for intertextuality to be established, a proposed intertextuality must be interactionally recognised, be acknowledged, and have social significance. The social construction of intertextuality both influences and occurs within a cultural ideology that constrains what texts may be juxtaposed and how those texts might be juxtaposed. The authors discuss theoretical

constructs defining intertextuality as a social construction, then present a microanalysis of a first-grade reading lesson based on recent work applying interactional sociolinguistics to classrooms. The microanalysis shows how teachers and students may use intertextuality (a) to define themselves and each other as readers and as students, (b) to form social groups, (c) to identify and validate previous events as sources of knowledge, and (d) to construct, maintain, and contest the cultural ideology of the simultaneously occurring teacher-class and peer-peer interaction.

- 94-325 Canagarajah, A. Suresh** (U. of Jaffna). Critical ethnography of a Sri Lankan classroom: ambiguities in student opposition to reproduction through ESOL. *TESOL Quarterly* (Washington, DC), **27**, 4 (1993), 601–26.

The way in which domination is experienced and oppositional tendencies are formed in classroom life have to be observed closely rather than conceived abstractly. This ethnographic study of 22 tertiary-level Tamil students following a mandatory English for general purposes (EGP) course reveals that whereas the lived culture displays opposition to the alienating discourses inscribed in a U.S. textbook, the students affirm in their more conscious statements before and after the course their strong motivation to study ESOL. Interpreting this contradiction as reflecting the conflict students face

between cultural integrity, on the one hand, and socioeconomic mobility, on the other, the study explains how students' desire for learning only grammar in a product-oriented manner enables them to be somewhat detached from cultural alienation while being sufficiently examination oriented to pass the course and fulfil a socio-economic necessity. However, this two-pronged strategy is an ideologically limiting oppositional behaviour that contains elements of accommodation as well as resistance and unwittingly leads students to participate in their own domination.

- 94-326 Corson, David J.** Minority social groups and nonstandard discourse: towards a just language policy. *Canadian Modern Language Review* (Toronto, Canada), **50**, 2 (1994), 271–95.

This article tries to provide some critical guidelines that may help teachers deal more sensitively with matters of standard and nonstandard speech. It may also help school administrators to design more just language policies for minority social groups. It considers social groups who use a nonstandard variety of a dominant language, not the minority language of a different culture. In Canada, non-

standard varieties of English or French can include overseas varieties, such as West Indian creoles, or dialects of English or French used by First Nation peoples, or the many nonstandard varieties used by Canadians who are marginalised from the mainstream by other social, geographical, or cultural factors.

- 94-327 Kelly, Caroline and others** (U. of London). The role of social identity in second-language proficiency and use: testing the intergroup model. *Journal of Language and Social Psychology* (Clevedon, Avon), **12**, 4 (1993), 288–301.

This study provides a test of the basic intergroup model of second-language acquisition where sub-

jects were 67 members of the Spanish community in London. Dependent variables comprised measures

of actual and self-reported second-language proficiency as well as measures of language use and opinions about language use. Independent variables comprised measures of ingroup identification and perceptions of intergroup relations. Analyses pro-

vided some support for the intergroup model, particularly the impact of group identification and vitality on patterns of language use, although findings relating to certain other aspects of the model were rather mixed.

- 94–328 Klassen, Cecil** (Douglas Coll.) **and Burnaby, Barbara** (Ontario Inst. for Studies in Ed.). 'Those who know': views on literacy among adult immigrants in Canada. *TESOL Quarterly* (Washington, DC), **27**, 3 (1993), 377–97.

Two approaches (quantitative and qualitative) are used to explore the topic of Canadian adult immigrants who are new users of English and who have little literacy experience. First, available statistics from a number of sources are used to provide an overview of this group. Second, a Toronto-based case study is used as an example of the kind of qualitative study which is needed for a richer understanding of the issue at hand. The study

explores the everyday uses that a group of Latin American adults have for reading and writing. The results suggest that literacy needs exist in both Spanish and English. The article concludes by drawing attention to the contradiction, on the one hand, of government commitments to immigration, multiculturalism, and training and, on the other hand, of the lack of appropriate services provided for the special needs of immigrants.

- 94–329 Myers-Scotton, Carol** (U. of South Carolina). Common and uncommon ground: social and structural factors in codeswitching. *Language in Society* (Cambridge), **22**, 4 (1993), 475–503.

The social forces affecting the performance of codeswitching (CS) may be distinguished from those factors controlling its basic structure, with which they interact. The constraints on possible patterns in CS are largely under innately based controls. These constraints are presented here in a model of intrasentential CS, and their validity is tested against findings of CS practices in a number of communities; all options can be accounted for

under the model. Thus the options for CS structures seem universally set; but community-specific or group-specific social forces may determine which permissible patterns are preferred. In addition, micro-level, discourse-based factors may prompt individuals to produce certain CS structures. A second model of the social motivations for CS helps explain both the macro- and micro-level preferences.

- 94–330 Paulston, Christina Bratt and others** (U. of Pittsburgh, PA). Language regenesis: a conceptual overview of language revival, revitalisation and reversal. *Journal of Multilingual and Multicultural Development* (Clevedon, Avon), **14**, 4 (1993), 275–86.

It is argued that language revival, language revitalisation, and language reversal constitute three separate phenomena, subsumed under the concept of language regenesis. Language regenesis and its

subcategories is defined and illustrated with the intent of establishing a clear and common terminology for these concepts – this is done here through a comparison of case studies.

- 94–331 Ping Chen** (U. of Queensland, Australia). Modern Written Chinese in development. *Language in Society* (Cambridge), **22**, 4 (1993), 505–37.

As a case study in the formation of a new written language in a speech community moving from diglossia toward a 'standard-with-dialects', this article analyses the development of M[odern] W[ritten] C[hinese] during the past 80 years. After a brief account of the historical background, the article discusses the sources and avenues of influence on the development of MWC, then examines the

emergent grammatical and lexical norms, and investigates the variations displayed by the four main Chinese communities: mainland China, Taiwan, Hong Kong, and Singapore. The role of language planning is also explored. The similarities and differences between China and Western Europe, in their progress from diglossic to non-diglossic communities, are discussed.

**94-332 Stein, Roberta F. and Eastman, Carol M.** (U. of Washington, Seattle).

The negotiation and outcome of language and culture contact. *Language Problems and Language Planning* (Amsterdam), **17**, 3 (1993), 238–54.

In the lived-in practice of one's first language and culture, mastery within one's social niche is the expectation and, barring disabilities, the result. Contact with a second language and culture leads to the possibility of individual choice within a social context of greater or lesser constraints. Personal goals, political and economic relations, and socio-cultural circumstances will largely determine the outcome of contact and the language strategies available. In the negotiation of contact, the outcome may be mastery of the grammatical structure alone,

varying degrees of communicative ability, integration into the new group, or the ability to use the language as a means of making a social statement, whether as a sign of association with another group or as an attempt to garner prestige within or dissociate themselves from the reigning social order of their own community. Here the authors suggest how the outcome of language and culture contact can be predicted only once an understanding of the context has been achieved.

## Psycholinguistics

**94-333 Carreiras, Manuel** (U. of La Laguna) and **Clifton, Charles Jr.** (U. of Massachusetts/Amherst). Relative clause interpretation preferences in Spanish and English. *Language and Speech* (Hampton Hill, Middx), **36**, 4 (1993), 353–72.

Five experiments measured reading time for Spanish and English sentences containing a complex NP followed by a relative clause (e.g. *...the daughter of the colonel who had an accident*). As has been previously reported, Spanish sentences were read more rapidly when the content of the relative clause forced it to modify the first of the two NPs in the complex NP (*the daughter*) than when it modified the second NP (*the colonel*). Their English translations showed no difference in reading time. This preference to take the first noun as a host for the relative clause in Spanish occurred whether the relative clause was disambiguated by morphological gender marking

or by its content. The results are generally consistent with the claim that the Late Closure parsing strategy does not apply universally across languages. However, an alternative hypothesis is proposed here, namely, that the Late Closure parsing strategy fails to apply across all phrase types within a language, and applies to relative clauses in neither English nor Spanish. Instead, a different principle, which the authors term the 'construal hypothesis', accounts for processing of phrases such as relative clauses which do not play the role of a 'primary relation' within a sentence.

**94-334 Golden, Richard M.** (U. of Texas at Dallas) and **Rumelhart, David E.** (Stanford U.). A parallel distributed processing model of story comprehension and recall. *Discourse Processes* (Norwood, NJ), **16**, 3 (1993), 203–37.

An optimal control theory of story comprehension and recall is proposed within the framework of a 'situation'-state space. A point in situation-state space is specified by a collection of propositions, each of which can have the values of either 'present' or 'absent'. A trajectory in situation-state space is a temporally ordered sequence of situations. A reader's knowledge that the occurrence of one situation is likely to cause the occurrence of another situation is represented by a subjective conditional probability distribution. A multistate probabilistic (MSP) causal chain notation is also introduced for conveniently describing the knowledge structures implicitly represented by the subjective conditional probability distribution. A story is represented as a partially specified trajectory in situation-state space, and thus, story comprehension is defined as the problem of

inferring the most probable missing features of the partially specified story trajectory. The story-recall process is also viewed as a procedure that solves the problem of estimating the most probable missing features of a partially specified trajectory, but the partially specified trajectory in this latter case is an episodic memory trace of the reader's understanding of the story. A parallel distributed processing (PDP) model whose connection strengths are derived from the MSP causal chain representation is then introduced. The PDP model is shown to solve the problem of estimating the missing features of a partially specified trajectory in situation-state space, and the model's story-recall performance is then qualitatively compared to known performance characteristics of human memory for stories.



**94-335 Golinkoff, Roberta Michnick** (U. of Delaware) **and others.** Early object labels: the case for a developmental lexical principles framework. *Journal of Child Language* (Cambridge), **21**, 1 (1994), 125–55.

Universally, object names make up the largest proportion of any word type found in children's early lexicons. Here we present and critically evaluate a set of six lexical principles (some previously proposed and some new) for making object label learning a manageable task. Overall, the principles have the effect of reducing the amount of information that language-learning children must consider for what a new word might mean. These principles are constructed by children in a two-tiered developmental sequence, as a function of their sensitivity to linguistic input, contextual information, and social-interactional cues. Thus, the process of lexical acquisition changes as a result of the particular principles a given child has at his or

her disposal. For children who have only the principles of the first tier (REFERENCE, EXTENDIBILITY, and OBJECT SCOPE), word learning has a deliberate and laborious look. The principles of the second tier (CATEGORICAL SCOPE, NOVEL NAME – NAMELESS CATEGORY' or N<sub>3</sub>C, and CONVENTIONALITY) enable the child to acquire many new labels rapidly. The present unified account is argued to have a number of advantages over treating such principles separately and non-developmentally. Further, the explicit recognition that the acquisition and operation of these principles is influenced by the child's interpretation of both linguistic and non-linguistic input is seen as an advance.

**94-336 Jensen, Knud Anker** (U. of Aarhus) **and Ulbæk, Ib** (Roskilde U. Center). The learning of the past tense of Danish verbs: language learning in neural networks. *Applied Linguistics* (Oxford), **15**, 1 (1994), 15–35.

This paper reports the results of simulating the learning of the past tense of frequent Danish verbs on a relatively simple neural network. The purpose was to test the ability of different networks to generalise the acquired knowledge to unfamiliar verbs. The main hypothesis is that this ability is due not only to simple, statistical frequency, but is also rooted in the system's internal representation of the verbs' phonological features. In order to test this hypothesis, different ways of training and testing the

networks were used. The conclusion is that neural networks are able to generalise the past tense form from the base form, and that phonological form plays a significant role in generalising. This questions the scope and validity of the models of learning that are currently adhered to in both first and second language learning theories. The generalisation of the results to human language learning, though, is constrained by the artificial learning and testing conditions.

**94-337 Lennox, Carolyn** (Peel Board of Ed., Mississauga, Ontario) **and Siegel, Linda S.** (Ontario Inst. for Studies in Ed.) Visual and phonological spelling errors in subtypes of children with learning disabilities. *Applied Psycholinguistics* (Cambridge), **14**, 4 (1993), 473–88.

This study investigated the hypothesis that children with a reading disability understand and use sound-spelling correspondence rules less frequently in spelling than children with other learning disabilities and normally achieving children. To test this hypothesis, spelling errors of children between the ages of 6 and 16 with a reading disability (RD), an arithmetic disability (AD), and normally achieving children (NA) were examined. Two groups of children with an arithmetic disability were included: those with good spelling skills (AD-good), and those with poor spelling skills (AD-poor). The accuracy of the spelling errors according to sound-spelling correspondence rules (phonological accuracy) of the children was determined using both a constrained system (inclusion of position cues) and an unconstrained system (in which positional cues

were irrelevant). The visual similarity of the error to the target word was also determined. The RD group at all ages produced significantly fewer phonologically accurate misspellings than the children with normal achievement scores, whether the constrained or the unconstrained scoring system was used. The AD-poor spellers and the RD group produced significantly fewer phonologically constrained, accurate misspellings than the NA group. Using the unconstrained measure, the AD-poor spellers at the youngest age level displayed as much difficulty using rudimentary sound-symbol conversion rules as the RD group, while at the older age levels, they did as well as the NA group. AD-good spellers performed as well as the NA group on both measures at all age levels. Children who were good readers and spellers (Good RS) were compared with

children who were poor readers and spellers (Poor RS) and with children who were good readers and poor spellers (Mixed RS). Mixed RS produced significantly more phonologically and visually accurate misspellings than Poor RS. In summary, subtypes of learning-disabled children use spelling strategies that are significantly different from each other. RD children have the most difficulty acquiring the knowledge of sound-spelling correspondence rules that are necessary for English spelling skills. The performance of AD children

depends on the complexity of the scoring system, age, and spelling ability. Those students whose knowledge of sound-spelling correspondence rules is sufficiently well developed for reading but not for spelling (good readers/poor spellers) develop their phonetic skills more slowly than the good readers/good spellers. The understanding and use of phonological rules varies according to the subtype of learning disability, with children with a reading disability performing the most poorly at all age levels.

- 94-338 Mills, Carol Bergfeld** (Goucher Coll. and American Inst. for Research) **and others.** Procedural text: predictions of importance ratings and recall by models of reading comprehension. *Discourse Processes* (Norwood, NJ), **16**, 3 (1993), 279–315.

Two models of text comprehension, a referential model proposed by Kintsch and van Dijk (1978) and a causal model proposed by Trabasso and Sperry (1985), were tested in two experiments with eight procedural texts. In Experiment 1, 24 female college students rated the importance of propositions, idea units, and sentences to the overall procedure described in the texts on a 7-point scale. In Experiment 2, 16 female college students recalled each of the eight texts immediately after reading it. Predictors derived from the models were used to predict the ratings and the recall in multiple regression analyses. The results showed that the amount of variance accounted for by the predictors

varied from text to text. For the ratings, the causal model accounted for significantly more variance than the referential model. For the recall, the causal model generally accounted for more variance but the difference was not significant. For the referential model, level within the hierarchy accounted for the most variance and for the causal model, the causal chain variable accounted for the most variance. The models were not as powerful as in previous research with narrative texts, perhaps because these models do not take into account the cognitive representation involved in doing the task described by a procedural text.

- 94-339 Moore, Chris** (Dalhousie U., Canada) **and others.** Developmental relationships between production and comprehension of mental terms. *First Language* (Chalfont St. Giles, Bucks), **14**, 1 (1994), 1–17.

Mental terms, including belief and desire terms, were studied in a sample of 14 mother-child pairs longitudinally when the children were 2;0, 3;0, and 4;0 in order to examine the acquisition of these terms. Percentage use of utterances involving belief and desire terms in naturalistic interactions were calculated for each subject. In addition, children at 4;0 were tested for comprehension of the distinctions between the belief terms *know*, *think* and *guess*, using a task designed to assess the understanding of the expression of relative certainty. Results showed an interlocking of mothers' use of belief terms, children's use of desire and belief terms, and children's comprehension of belief terms.

Children's use of desire terms at 2;0 was related to their use of belief terms at 3;0 and their comprehension of belief terms at 4;0, perhaps reflecting their developing theory of mind. Maternal use of belief terms when their children were 2;0 was significantly related to their children's concurrent use of desire terms, and significantly predicted their children's use of belief terms both one and two years later. Mothers' use of belief terms at 2;0 also predicted their children's comprehension of belief terms at 4;0. These results are consistent with a picture of maternal linguistic scaffolding of their children's developing theory of mind.

- 94-340 Robb, Michael P.** (U. of Connecticut) **and others.** A quantitative analysis of the single-word stage. *First Language* (Chalfont St. Giles, Bucks), **14**, 1 (1994), 37–48.

A quantitative analysis of the single-word stage was performed by evaluating children's production of

words, relative to nonwords, along a monthly developmental continuum. The vocalisations of six

children were sampled over a period of one year, spanning the first two years of life. The development of word use was studied by calculating the ratio of words to nonwords in each child's monthly vocalisation sample. Results of the analyses indicated that nonwords were present in the children's vocalisations throughout the single-word stage of

development. Further, individual children had distinct 'word curves' defining their early lexical development. The resulting word curves are discussed in the context of stage models of vocalisation development and existing measures of speech and language acquisition.

- 94-341 Yelland, Gregory W. and others** (Monash U., Australia). The metalinguistic benefits of limited contact with a second language. *Applied Psycholinguistics* (Cambridge), **14**, 4 (1993), 423–44.

This study examined whether the often-reported metalinguistic benefits of childhood bilingualism extend to children whose experience with a second language is considerably more limited, and if so, whether this metalinguistic advantage flows on to reading acquisition. Its purpose was to provide direct evidence of a causal role for metalinguistic awareness in reading acquisition. The study focused on the developing word awareness skills of two groups of preparatory and grade 1 children: one group was strictly monolingual in English; the other, the 'marginal bilingual' group, consisted of English monolinguals who were participating in a second language programme that provided one

hour of Italian instruction each week. After only six months of instruction in Italian, the marginal bilingual children showed a significantly higher level word awareness than their monolingual counterparts. This advantage weakened across grade 1, as both groups approached ceiling levels of performance. Nonetheless, the initial advantage flows through to the first major step in reading acquisition, with the grade 1 marginal bilinguals showing significantly greater word recognition skill than the monolinguals, thus strengthening the argument for a causal role in reading acquisition for word awareness.

## Pragmatics

- 94-342 Duszak, Anna** (U. of Warsaw, Poland). Academic discourse and intellectual styles. *Journal of Pragmatics* (Amsterdam), **21**, 3 (1994), 291–313.

The paper borrows inspiration from three main sources: discourse organisation and processing, genre analysis, and ethnography of communication. It explores cross-cultural variation in academic discourse on the basis of some English and Polish data from the field of language studies. Strategies of paper introduction are examined and compared

with the help of an extended version of Swales' (1990) Move Analysis. It is argued that there exist potential areas of (in)compatibility between the two writing styles. These involve first of all the scope of information that is normally revealed in initiating a paper, and the rhetorical work that is done to handle academic face-phenomena.

- 94-343 Kamio, Akio** (Dokkyo U., Japan). The theory of territory of information: the case of Japanese. *Journal of Pragmatics* (Amsterdam), **21**, 1 (1994), 67–100.

This paper proposes a pragmatic theory of the territory of information. Just as many animals, including humans, have territories of which they claim their ownership, this paper asserts that the use of human language is controlled by a notion of territory. The target of analysis in terms of this notion here is Japanese. Arguments are presented which demonstrate that the notion of territory does

indeed play a major role in the language. A formalisation of the theory of territory of information is attempted, and, using examples from Japanese, the details of the theory are explained and justified. Finally, applications of the theory to other languages and to a variety of pragmatic phenomena are suggested.

- 94-344 Koike, Dale April** (U. of Texas at Austin). Negation in Spanish and English suggestions and requests: mitigating effects? *Journal of Pragmatics* (Amsterdam), **21**, 5 (1994), 513–26.

Negation in speech acts has been identified in past studies as an element that can be used to mitigate the effect of an utterance. The objective of this study is to examine the use of negation in requests and suggestions, principally using data from Spanish and English. It is shown that negation does not always serve to communicate politeness or mitigation in all speech acts, and in fact, may have the opposite effect. The notions of positive and negative pol-

iteness posited by Brown and Levinson (1987) do account for many uses of negation in suggestions, and in fact, shed light on the nature of interrogative suggestions in general. They do not apply as easily to requests, however, in that they do not account for differences in force created by the negative in both languages. The data are also examined in terms of what they reveal about the mitigation of suggestions and requests through implicature.

- 94-345 Kourilová, Magda** (Comenius U., Bratislava, Slovakia). Epistemic modality in written scientific discourse. *UNESCO ALSED-ESP Newsletter* (Copenhagen), **15**, 2 (1993), 4–18.

Epistemic modality is defined as the expression of a speaker or writer's confidence in and commitment to propositional content, and epistemic devices can project honesty, modesty, caution and politeness. The conventions of academic discourse require such markers, and examples are given of the exponents of speculation, approximation, modest claims, claims of centrality, emphasis, intensification, limitation, surprise, satisfaction, disappointment, apology, etc. The quantitative part of the data is limited to two comparisons: journal articles make more use than textbooks of implicit expressions of causal relationship (63% compared to 23%, based on four texts), and the comment sections of journal articles contain far more epistemic devices than the results sections (4·51% compared to 0·05%, based on three articles).

Many cross-cultural differences are found in the use of epistemic markers. German writing tends to use extensive hedges, afterthoughts and 'auto-objections', and is thus difficult for others to read. English discourse is typically target-oriented and inductive with a rheme-theme pattern, French discourse deductive and theme-rheme. U.S. writers often place less stress on doubt, caution, modesty, etc., than British ones. Non-native users of English may have problems with their poor repertoire of epistemic markers, and more general problems if their recent cultural and political history has involved manipulation, suppression of debate and disregard for truth.

- 94-346 Murata, Kumiko** (Toyama Prefectural U., Japan). Intrusive or co-operative? A cross-cultural study of interruption. *Journal of Pragmatics* (Amsterdam), **21**, 4 (1994), 385–400.

This paper highlights how interruptions are used within the system of turn-taking, referring to the rules of turn-taking set out by Sacks *et al.* (1974), and classifying the kinds of interruption used by conversational participants. Interruption is here classified into two main types: co-operative and intrusive. Intrusive interruption is further divided into three types: topic-changing, floor-taking, and disagreement interruptions. The occurrence of these

different types of interruption is examined in the data from three different interactions; NSE–NSE (Native Speakers of English), NSJ–NSJ (Native Speakers of Japanese), and NSE–JSE (Japanese Speakers of English) interactions. It is noted that the frequency of the use of the different types of interruption varies across cultures. Furthermore, this paper discusses interruption from the perspective of the sociocultural values attached to its use.

- 94-347 Pavlidou, Theodossia** (Aristotle U. of Thessaloniki, Greece). Contrasting German-Greek politeness and the consequences. *Journal of Pragmatics* (Amsterdam), **21**, 5 (1994), 487–511.

The aim of this paper is twofold: (a) to compare Greek and German conversational styles, and (b) to discuss politeness not with respect to a single, face-

threatening, act, but within the context of the speech event as a whole (here the telephone call), and point out some consequences for the Brown



and Levinson (1978, 1987) theory. An analysis of telephone calls in Greece and Germany suggests that Greeks use phatic utterances almost twice as frequently as Germans on the telephone. Moreover, it is maintained that Greeks and Germans use phatic utterances in different ways. Phatic utterances in Greek telephone conversations seem to serve mainly

the purpose of enhancing the relationship aspect of communication, regardless of possible face threats. On the other hand, Germans seem to use phatic utterances in order to reduce a face threat that is connected with the reason for calling, and not with the speech event of calling itself.

**94–348 Thompson, Susan** (U. of Liverpool). Aspects of cohesion in monologue. *Applied Linguistics* (Oxford), **15**, 1 (1994), 58–75.

The demands placed on native and non-native speakers in understanding and creating coherent monologue are well recognised. In order to achieve a coherent interpretation of monologue, the listener must be able to interpret the semantic relations lying beneath the surface text. The speaker of a monologue is therefore primarily responsible for making these meaning networks transparent to the listener. This paper analyses 20 different monologues and exam-

ines the interrelating roles which clause relations, lexico-grammatical cohesion, and intonation choices play in creating cohesive monologue. It is argued that these linguistic resources can be exploited by the speaker to signal explicitly the underlying network of concepts in the monologue, thus helping the listener to make a coherent interpretation of the text.