Book reviews


Reviewed by Yael Ziv*

Referring expressions have been studied rather extensively by linguists and philosophers of a variety of schools for quite some time. Most studies were conducted within the logical, semantic and pragmatic framework(s) available. Accessing noun-phrase antecedents (ANPA) is not just another book about referring expressions, it is unique in that it proposes a major change in the analysis of this topic by introducing cognitive considerations and appealing to an account in terms of processing procedures and memory structure. In this respect it constitutes an interesting and significant contribution to linguistic theory on the one hand and to general cognitive studies on the other. From the linguistic perspective it raises and provides interesting new answers to such questions as the interaction between grammar and cognitive principles and grammar and pragmatics and from the cognitive studies point of view it delineates a challenging line of research which might shed light on such intriguing problems as the relationship between central and peripheral cognitive systems and the structure of our memory.

The book is divided into three parts with an introductory chapter portraying Ariel's Accessibility Theory (AT) and the following sections discussing discourse references (part I), the applicability of AT to sentence-level phenomena (part II) and the interaction of AT with pragmatic and social factors (part III). In this review I will concentrate on AT and discourse references and only comment briefly on the sentential applications of AT.

In previous pragmatic accounts of referring expressions a close link has been established between definiteness and givenness and the claim was made that givenness is associated with specific context types. A three-way contextual distinction was proposed between General/Encyclopaedic Knowledge, Physical/Situational Knowledge and Linguistic Knowledge and a correspondence was supposed to exist between the different context types and the various linguistic expressions indicating givenness. (This is the view advocated

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explicitly in Ariel 1985.) Following philosophers, linguists attributed existential presuppositions to definite descriptions, and trying to characterize the cognitive properties of definite descriptions, psycholinguists showed that different referring expressions vary as to the time that it takes to recover them from memory (cf. Clark and Sengul 1979 and Garrod and Sanford 1982). Within the existing theoretical set-up these psycholinguistic findings were regarded as incidental properties of the various referential expressions. In *ANPA* Ariel advances a new approach to the study of referring expressions. In view of the empirical invalidity and the erroneous predictions of some of the claims associated with what she calls the 'geographic' view of contextual codification (viz. the three possible contextual sources of referring expressions), she proposes that what is linguistically coded is the degree of accessibility of the referring expression to be retrieved. Accordingly, natural languages mark NP's as accessible to varying degrees and thereby facilitate the retrieval process required in the course of utterance interpretation.¹ The codification of accessibility is thus claimed to correlate with the structure of our memory. Here too the locational distinction into different memory stores with which the various accessibility markers accord is rejected in favour of a more recent model akin to the Parallel Distribution Processing, by which items in memory differ as to their degree of activation. The various markers apparently signal difference in activation or, alternatively, different "activation patterns determine the choice of the referring expression actually used" (Ariel 1990: 15). Following Ariel, degree of accessibility ceases to be an incidental property of referring expressions and becomes the property accounting for their particular distributional patterns. The marking system is thus regarded as a grammaticalization of cognitive factors functional in accessing information from memory. An interesting by-product of this particular treatment concerns existential presuppositions. They are regarded not as defining properties of definite descriptions but rather as properties derived from the relevant degree of accessibility and the type of context referred to (cf. Prince 1978, with which this conclusion is consistent).

The relevant aspect of the notion of Accessibility in the context of *ANPA* is of course its linguistic codification; no attempt is made at an exhaustive characterization of this notion, for the simple reason that this is primarily a cognitive psychologist's enterprise. Nevertheless, Ariel explores four factors contributing to the accessibility status of an NP antecedent and complicating an otherwise more transparent picture of the cognitive-linguistic correspondence (one that was advocated in Ariel 1985): Distance (between antecedent and anaphor), Competition (between alternative antecedents), Saliency (of the

¹ Ariel claims that the cognitive principle underlying accessibility markings is shared by a variety of linguistic categories involved in context retrievals. In this book she restricts her attention to NP's. In her dissertation *Givenness marking* (Ariel 1985), however, Ariel discusses the accessibility markings of NP's, V's, VP's and whole clauses.
antecedent in terms of topic status) and Unity (of the frame of reference between the antecedent and its anaphor).

Ariel suggests that there may be additional factors involved in activating memory, some specific to individuals and others shared by speakers in general. The factors that she mentions are thus supposed to be illustrative of the relevant type and range of such functional entities. There is clearly no attempt to account for all the relevant distributional properties of the variety of referring expressions. In fact, at the current stage of our ignorance, it seems premature to try to determine which factors rate higher than others in the ultimate calculation of accessibility. Thus, whether it is always Distance that takes priority over Unity (as in the examples discussed), or whether it is a function of other potential interactions between the various factors, should be a question which would constitute a challenge to cognitive psychologists. The appeal to independently attested cognitive evidence for a specification of the relevant factors affecting retrievability from memory is also justified on the basis of the need to avoid circularity in instances where distinct linguistic signs would constitute the sole rationale for the postulation of different activation states.

This proposal coupled with the observation that there is a scale of Accessibility makes quite accurate predictions cross-linguistically about the distribution of referring expressions in real discourse. The scale of accessibility ranges from High Accessibility markers such as pronouns, which are rather low in informativity, not rigid (with respect to the designation) and quite attenuated, and are thus used characteristically, though not exclusively, when the antecedent is highly accessible (e.g. in Linguistic Context) through Intermediate Accessibility markers such as deictics or demonstratives, which are somewhat more informative and less attenuated than their high accessibility counterparts and are consequently utilized to retrieve antecedent entities, which are somewhat less accessible (e.g. from Physical Contexts) to Low Accessibility markers, such as proper names and definite descriptions which are higher in informativity, rather rigid in designation and the least Attenuated and are thus used characteristically (though, again, not exclusively) to retrieve items which are not readily accessible (e.g. from General Knowledge). The hierarchy of Accessibility marking, which, in fact, shows finer distinctions than this three-way division would seem to suggest, is offered as a universal, so that although languages differ with respect to the particular markers they utilize and the functions they assign to them, they still all obey the same Accessibility Hierarchy. This is a very important empirical claim encompassing an insightful observation about the types of regularities evident across languages and at the same time depicting a novel brand of generalization in a domain where very little has been attempted in the way of universal characterizations.

A nice corroboration of the psychological reality of the hierarchy of accessibility comes from two sources. One which Ariel mentions in a different
context is the manipulative use of the different referring expressions, such that either a high accessibility marker is used deliberately where a low accessibility marker would do, or vice versa. The second piece of corroboration, not mentioned by Ariel, is provided by the observation that people correct themselves with respect to the particular referring expression used as soon as they realize that they made a mistake in assessing the degree of accessibility to the addressee of the referential expression in question. Accordingly, in instances where a high accessibility marker such as a pronoun is used under the apparently erroneous assumption that the referential expression in question is easily retrievable by the addressee, the speaker often corrects himself by raising the level of informativity and utilizing a lower level accessibility marker instead. In such cases the speaker may use a demonstrative pronoun or a definite description in place of the ill-fitting pronoun, as the case may be.\(^2\)

AT and the various discourse references are discussed quite extensively in the Introduction and in part I.\(^3\) In part II Ariel claims that as cognitively based principles determining anaphoric choices, accessibility considerations are relevant not just to discourse type retrievals but also to sentence level phenomena. The strongest version of this view, which is not defended by Ariel although it is presented as a serious alternative to be studied in the future, states that AT provides the cognitive rationale behind the grammaticalized system of sentence-level anaphora, specifically, “it is the degree of Accessibility which differentiates between the various nominal expressions (anaphors, pronominals and names) subjected to Binding Principles” (p. 97). Thus, reflexives and reciprocals, which are markers of highly accessible entities are restricted to co-occurring within a minimal syntactic domain with their antecedent, just as AT predicts, whereas names and definite descriptions, which are lower Accessibility markers, cannot co-occur in the same restricted syntactic domain with their antecedents. In place of this extreme position on the relation between grammar and cognitive principles such as AT, Ariel believes that at this stage of our knowledge a weaker position is more defensible, namely, that AT constrains possible grammaticalizations of pronominals and, in addition, it governs the optional decisions concerning sentential anaphora, specifically those left open by the grammar (i.e. free variation and marked and unmarked distributions). Thus, zero vs. pronoun subject preferences are shown to be governed by the same principles (Informativity, Rigidity and Attenuation) which assign Accessibility elsewhere (ch. 6), while Switch Reference systems, resumptive pronouns and backwards anaphora are

\(^2\) Additional corroboration of the accessibility hierarchy may come from the distributional properties of antecedents and anaphoric expressions associated with Right and Left Dislocation constructions (cf. Ziv ms.).

\(^3\) In fact, the introduction seems more appropriate as a summary of the approach than as its initial presentation. It is very dense, and it seems to assume more material as given or accessible than is warranted.
shown to be accountable by the Unity principle (ch. 7). Ariel proposes that AT makes the GB ‘Avoid Pronoun’ principle redundant, by making the correct prediction where it works and providing principled explanations for those cases where it is inapplicable. Despite the evidence Ariel quotes in favor of a cognitive-pragmatic account that provides both a description and an explanation of certain linguistic phenomena heretofore considered syntactically arbitrary, she is still very careful not to encroach on the territory of syntax and she accords GB primary status in the overall linguistic theory espoused.

In part III the claim is made that the proposed concept of accessibility is in fact a tool which is functional within the theory of Relevance, such that the principles established for the search of the appropriate antecedent are operative within the overall process of context determination for the purpose of relevance resolution. For Sperber and Wilson the contextual search proceeds from the most accessible to the least accessible context; for Ariel, the linguistic expressions are marked directly for the degree of accessibility of the mental representation of the entity in question and thus assist the addressee in retrieving the appropriate antecedents in the relevant context. Accordingly, accessibility is at the service of relevance. The question of the potential redundancy of Accessibility vis-à-vis Relevance is answered in the negative by showing that relevance theory with or without the appropriate version of Levinson’s Minimization (Levinson 1987) makes the wrong types of predictions with respect to the distributional potential of the various markers; the accurate predictions are shown to be made possible by the adoption of the accessibility criteria explored by Ariel.4

The particular treatment of referring expressions proposed by Ariel in *ANPA* offers an interesting answer to the more general question pertaining to the nature of the interaction between grammar and pragmatics or, put differently, divides the grammar/non-grammar borderline in a way which is in conflict with current syntactic theories. Accordingly, reference to non-linguistic factors does not automatically render a phenomenon extra-grammatical. Only those non-linguistic aspects of communication which crucially refer to such general cognitive or social principles as Rationality (Kasher) or Relevance (Sperber and Wilson) and do not make reference to any aspect of linguistic form are extra-grammatical. However, principles associated with specific linguistic markers, such as the ones argued for in AT, necessarily

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4 In fact, Ariel does not commit herself to Relevance Theory as it is. She proposes, rather, that whatever pragmatic theory is ultimately adopted, Accessibility Theory ought to be incorporable within it. In this context Ariel erroneously assumes that Sperber and Wilson’s Theory of Relevance amounts to essentially the same thing as Kasher’s (1976, 1982) Principle of Rationality. Despite the fact that both principles purport to replace the Gricean Maxims, they are clearly distinct in their predictions with respect to such phenomena as justification of speech acts and redundancies. In fact, it has been claimed (cf. Ziv 1988) that both principles are required jointly in an overall theory of pragmatics.
constitute an integral part of the grammar of natural language. (This view of pragmatics is also advocated in Kasher 1984 and in Sperber and Wilson 1986.)

In summary, ANPA is a challenging and significant study of referring expressions, which offers a fresh look at both the linguistic and the cognitive aspects of the topic in a well-argued and highly inspiring style. It provides strong empirical claims to be tested for their linguistic and their cognitive implications in future research. No study of this topic will be complete without reference to this book.

References


