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0 Introduction

Semantics as a distinct field was first proposed by Bréal in 1883. He suggested the term "sémantique" for the study of "the laws which govern the transformation of sense, the choice of new expressions, the birth and death of locutions." The translation of Bréal's *Essai de sémantique* as *Semantics: Studies in the Science of Meaning* popularized the term in English. For the next fifty years, the field of semantics concerned itself with historical research on word meaning. Stern's (1931) *Meaning and the Change of Meaning* provides a worthy synthesis of this first phase of research in semantics.

Saussure inaugurated the study of word meaning as a linguistic sign process. Saussure's dyadic model of the sign postulated a psychological correspondence between the arbitrary but conventionalized form and meaning of the word. His *Cours de linguistique générale*, published posthumously in 1916, championed a new synchronic view of linguistic description alongside the traditional diachronic approach. Moreover, Saussure privileged study of the language system (langue) over study of language performance (parole), which relegated context and discourse to the status of outsiders in linguistic description.

Under the influence of Saussure's *Cours*, Trier produced in 1931 the first truly synchronic semantic investigation. His analysis of so-called semantic fields introduced an area of research still alive today. About the same time, Bloomfield (1933) popularized the behaviorist view of linguistic semantics. For Bloomfield, the definition of meaning explicitly included "the situation in which a speaker utters [an expression] and the response it calls forth in a hearer" (1933: 139). Though they eschew terms like "concept" and "feeling," behaviorists clearly see utterance function in context as central to meaning. Yet paradoxically the effect of behaviorism, particularly on American linguistics, was to narrow its focus to structural relations between lexical items, leaving the description of discourse meaning to neighboring disciplines such as rhetoric, stylistics, and poetics. Structural and generative treatments of language took the word and the sentence as the province of semantic theory. The meaning of the sentence was seen as the product of the meanings of its component lexical items and their structural relations, according to the so-called Principle of Compositionality. The role of the sentence in larger units received scant attention, as did figurative meaning and idiomaticity, which ran foul of this principle (but see Katz 1964; Chafe 1968).

In their influential monograph *The Meaning of Meaning* (1923), Ogden and Richards drew a fundamental distinction between symbolic and emotive meaning. Their symbolic meaning corresponds to what other authors call ideational, descriptive, propositional, or referential meaning, while their emotional meaning corresponds to interpersonal, expressive, nonpropositional, affective, and stylistic aspects of meaning. The assumption was that ideational meaning could be studied as a part of competence independent of context, while interpersonal meaning was a performance (or discourse) phenomenon unsuitable for systematic investigation.

In a very different vein, around this same time, Sapir (1921, 1929, 1949) and Whorf (1956) were raising questions about the relationship between language, meaning, culture, and personality which remain central concerns of semantic theory. The degree to which our language determines our perception, often discussed under the heading of the "Sapir–Whorf Hypothesis," has become an issue again especially in the cognitive semantics of G. Lakoff and his associates (G. Lakoff 1987; G. Lakoff and Johnson 1980; G. Lakoff and Turner 1989; Kövecses 1986). This research direction has revitalized the synchronic study of metaphor as well. Metaphor was already a staple concern of traditional diachronic semantics due to its concern with figurative meaning extensions as a factor in meaning change. The study of metaphor also received fresh input from semantic feature theory in the 1960s, a development to which we now turn.

With roots both in anthropological linguistics and in the phonological feature theory developed by Trubetzkoy (1939) and the Prague School, semantic feature theory (also called componential analysis, markerese, and lexical decomposition) was integrated into the so-called Standard Theory of generative transformational grammar by Katz and Fodor (1963) and Katz and Postal (1964). Katz (1966, 1972) continued to develop feature theory to describe such semantic notions as meaningfulness, anomaly, contradiction, tautology, synonymy, antonymy, paraphrase, and so on. The extension of componential analysis in the direction of logical notation, especially by McCawley (1968a, 1968b, 1968c, 1970) and G. Lakoff (1970, 1971), was a major tenet of the Generative Semantics movement. Proposals for the representation of sentence meanings in predicate logical notation, particularly in the intensional logic developed by Montague (1968, 1970, 1974), have continued to flourish as an area of semantic theory. Montague's position, deriving from formal logic, equates meaning with truth conditions in a model or a possible world. This research follows traditional practice in associating truth-functionality with ideational sentence meaning and competence, leaving interpersonal meaning as a nontruth-functional performance (read: discourse) phenomenon.

By contrast with most other work in semantics, the functional-systemic linguistics of Halliday (1967, 1977, 1978) recognizes not only ideational and interpersonal meaning, but also textual meaning. It associates various sorts of meaning with choices made all along the way in the production of a sentence in a text. This sort of analysis reflects the proposals Firth made about semantic analysis as early as 1935 (see Firth 1957). Thus, systemic linguistics has operated with the goal of describing discourse meaning all along.

In the following paragraphs, we will see how the notion of meaning has increasingly become bound to discourse contexts, since the early 1970s or so. Discourse context has been evoked ever more frequently to handle phenomena not describable in terms of truth-functional and structural semantics. Speaker intentions and audience responses found their way back into semantic theory via pragmatics and speech act theory. Research on talk in real contexts showed the necessity for considering the interactional goals and relationship of conversational participants in the description of meaning. The gradual inclusion of context began to erode the traditional dichotomy between competence and performance, and as it did, interpersonal elements of meaning returned to prominence in semantic analysis.

The rest of this chapter is organized as follows. First I will sketch some of the salient research which led to an incremental evolution in our view of semantics to include discourse phenomena. Then I will look in turn at indexicality and anaphora, presupposition, speech acts, entailment, and interpersonal, especially figurative, meaning, showing how they have developed in recent linguistic theory, and how our understanding of them has shifted toward discourse and away from structural and truth-functional semantics. This shift has two outcomes: first, a reanalysis and fuller understanding of these narrowly conceived topics; and second, an influx of new data and interesting topics, which has widened and deepened our understanding of linguistic semantics.

Certain topics arise only within a discourse study of meaning, for instance cohesion, coherence, register, framing (all of which have their own separate chapters in this Handbook), and the interpersonal meaning of such devices as repetition, parallelism, allusion, and formulaicity. I will review salient contributions to the understanding of these phenomena in real discourse from recent years, with the goal of developing a "poetics of talk" (Tannen 1989). Finally, I would like to show how a discourse-based analysis can shed new light on a traditional staple of semantics, namely figurative meaning. Figurative meaning was a concern of semantic theory from the beginning, since figurative extensions of word meaning were characteristic of historical language change. Research on metaphor, hyperbole, tautology, and paradox persisted in semantic theory, because they interfere with the truth-functional analysis of sentence meaning according to the Principle of Compositionality (Katz 1964; Weinreich 1966; Levin 1977). Most recent attention to figurative meaning grows out of work in the pragmatics of (Gricean) implicature or cognitive linguistics following G. Lakoff (1987) rather than focusing on real discourse. By contrast, I will attempt to show how analysis of figures in concrete discourse contexts can contribute to our understanding of figurative language. In particular, I focus on passages where participants themselves comment metalingually (Jakobson 1960) on the meaning of the figures.

1 The Shifting Paradigm

Various strands of research in philosophy and linguistics combined to extend the structural paradigm in semantics. In this old model, words had meaning due to their relations within the vocabulary of a language. Each word contributed its discrete meaning to a syntactic unit, the meaning of which was then computable from the

component word meanings and their structural relations. This model gradually came to be considered a starting point for semantic analysis at best and a counterproductive fallacy at worst, as discourse increasingly came to serve as a site for the study not only of utterance meaning but even of word meaning. Austin's (1962) "performative analysis" showed that we use language to "do things with words" and not just to make true or false statements, which naturally entailed contextual correlates. Grice (1957, 1975) championed a theory of meaning grounded in speaker intentions, and he went on to show how context influences the meanings even of logical connectors. Moreover, Grice's notion of implicature gave linguists a way of developing inferential models of meaning, as witness for instance Gazdar (1979), Bach and Harnish (1979), Horn (1984), and Sperber and Wilson (1986).

Early on, G. Lakoff (1969) showed that deductions from contextual information and beliefs underlay judgments of grammaticality for many sentences (also Gordon and Lakoff 1975). Linguists began to feel the need for models of inference to determine grammaticality as well as meaning. Fillmore's interest in describing discoursal effects led him to propose frame theory as an approach to semantics (Fillmore 1976, 1985). Similarly, Labov's work on natural discourse, in particular oral narratives, led him to propose an analysis of affective meaning, which he termed "intensity" (Labov 1984). In response to truth-functional accounts of meaning, Harman (1977), Katz (1977), and others argued that linguistic meaning makes possible and explicates truth, not conversely. Finally, Reddy's (1969) recognition of the so-called "conduit metaphor" of communication exposed critical flaws in our traditional "message model" of linguistic interaction.

At the same time, Sacks (1992) and other sociologists were showing that everyday conversation was not only regular and describable, but contained mechanisms for clarifying and correcting factual content and linguistic form (in metalingual talk à la Jakobson 1960). This work reinforced the view of the audience as co-author (Duranti 1986; Goodwin 1986; Schegloff 1987) and meaning as subject to a process of negotiation in interaction. Meaning appeared to be negotiable even down to the level of the word (Lehrer 1983; Ochs 1984). Schegloff cited passages from natural conversation showing that the presumed lexical meaning of a word or the literal meaning of a sentence is often subordinate to – or even irrelevant compared with – the particular slot they occupy in interaction, the expectations participants have about the slot, and the response they elicit.

Halliday (1967, 1977, 1978) had long proposed – following Malinowski (1923, 1935) and Firth (1957) – that semantic theory recognizes interpersonal and textual aspects of meaning alongside ideational (or truth-functional) meaning. Further, Nunberg (1978) argued that polysemy and vagueness from any source require the same sort of inference-based processing, by which the recipient of an utterance seeks to reconstruct the speaker's goals, beliefs, and intentions. In this same vein, many linguists have sought to identify discourse strategies for determining contextual meaning rather than go on attempting to describe alleged discourse-independent meanings for sentence types, sentences, constructions, or even words. Moreover, as Stalnaker (1972, 1978), Cole (1978), and Green and Morgan (1981) argued, the presence of pragmatic principles in an integrated theory of linguistic descriptions clarifies the functions assigned to semantics and syntax. Hence, attempts to treat semantics and pragmatics in a single way, as Montague (1968) proposes, will necessarily miss important distinctions like

that between referential and attributive uses of descriptions (Stalnaker 1972). After all, Grice (1975) proposed so-called implicatures as a way of keeping logical analysis clean and simple.

Some basic notions of semantic theory have been recognized to be discourse (or pragmatic) phenomena from their very introduction into considerations of linguistic meaning. Thus Bar-Hillel (1954) drew attention to indexicality (or deixis) and anaphora as aspects of meaning requiring inferences about speaker beliefs and intended referents, beyond truth-functional semantics proper. In fact, even traditional grammarians such as Christophersen (1939) and Jespersen (1924) had recognized the fundamental discourse orientation of pronouns. The notion of presupposition (versus assertion) entered into the discussion of linguistic semantics from philosophy (Frege 1892; Russell 1905; and especially Strawson 1950), as did the recognition of performative utterances with nontruth-functional meaning (Austin 1962; Searle 1969, 1979). Other notions like entailment are less clearly demarcated into semantic versus discourse areas. By contrast, lexical semantics (word meaning) has since Saussure (1916) been assigned to purely structural relations within the vocabulary as a moreor-less closed system. Semantic relations like synonymy, hyponymy, and antonymy were in principle described without recourse to discourse contexts. In every case, we can note a general trend toward discourse approaches in recent years. Increasingly, these topics have acquired discourse dimensions beyond whatever may be said of them from a structural or truth-functional point of view (Nunberg 1978; Lehrer 1983; Green 1996).

2 Indexicality and Anaphora

Indexicality or deixis is the only area of meaning universally acknowledged to belong in the area of discourse or pragmatics, since it pertains to the contextual determination of reference which necessarily precedes a decision as to the truth of falsity of an assertion. Bar-Hillel (1954) estimates that over 90 percent of our declarative sentences are indexical in requiring implicit reference to the speaker, the addressee, the time and place of utterance with pronouns like *I* and *you*, adverbs like *now* and *yesterday*, *here* and *there*, *right* and *left*, and demonstratives like *this* and *that*. The meanings of such lexical items are simply not describable without noting that their reference shifts each time the setting changes, each time a new speaker takes over or points in a different direction. This sort of meaning is irrevocably bound to context, and it represents a historical foothold for discourse analysis within semantic theory.

Of course, we must also find referents for third person pronouns like *she* and *them* within the local context or within the foregoing discourse, though they do not necessarily shift with a change of speaker as true indexicals do. Those pronouns used to point to people and things in the immediate context are being used indexically/deictically, while those assigned to referents based on "coreference" with a noun phrase in the preceding discourse are called anaphoric. Often a single pronoun will have both indexical and anaphoric possibilities: thus in sentence (1) below, *she* and *him* can be interpreted as coreferential with *Sue* and *Al* respectively, or they may refer to other people indicated or otherwise prominent in the context of utterance:

(1) Sue told Al she wished him luck.

Research on anaphora in generative linguistics offers a good example of the progressive inclusion of discourse considerations into an area of semantics. Transformational grammarians began with the question of coreference (e.g. Lees and Klima 1963; Langacker 1969); the interpretation of pronouns as bound variables was not discovered until later, and the question of how reference was established for deictic pronouns or for "referring expressions" generally was not considered. As research in the syntactic treatment of anaphora progressed, however, binding of anaphora through so-called c-command by a preceding or hierarchically dominating noun phrase took center stage (Langacker 1969; Chomsky 1973, 1981). In sentence (1) above *he* and *she* are c-commanded by the noun phrases *Sue* and *Al*, so they may be interpreted as bound by them.

Some scholars in the "interpretive semantics" camp among generative linguists, notably Jackendoff (1972), insisted that anaphora was a semantic phenomenon to be handled with devices such as coreference tables, identifying NPs and representing their relations. This same basic notion appears in Chastain's (1975) description of "anaphoric chains," which hold not just within sentences but between the sentences of a discourse; see also Donnellan (1978) in this regard. Really, the discourse basis of pronoun interpretation goes all the way back to traditional grammarians such as Christophersen (1939) and Jespersen (1924), who espoused what has been labeled the "familiarity theory of definiteness" (Hawkins 1978; Heim 1983), namely:

A definite (description, name, pronoun) is used to refer to something that is already *familiar* at the current stage of conversation.

An indefinite (description) is used to introduce a *new* referent.

Karttunen (1976) sought to alleviate problems associated with this theory, by requiring that a definite must pick out an already familiar "discourse referent," while an indefinite introduces a new discourse referent. Heim (1983) expands on Karttunen's work and imbues the notion of "discourse referent" with substance in her "file change semantics." Kamp (1981) also looks to discourse for a unified treatment of deictic and anaphoric pronouns, proposing "discourse representation structures" similar to the "file cards" in Heim's approach: treating all anaphora as discourse anaphora solves problems associated with treating pronouns as bound variables in truth-functional semantic theories.

At the fringes of this shift in perspective, some linguists had been working on anaphora as a discourse problem all along. As early as 1967, Halliday was developing a treatment of anaphora in connected discourse built around his analysis of cohesion and text-semantic categories, namely *transitivity* (Actor, Process, Goal), *mood* (Subject, Predicate, Complement), and *theme* (Theme, Rheme). Chafe (1970, 1974, 1993) proposed a discourse-based interpretation of anaphora in terms of the given–new distinction as reflected in the presence of referents in consciousness. Givón (1973, 1982, 1985) argued for a pragmatic description of reference which would take discourse topicality and accessibility as well as cultural knowledge into account. Ariel (1988, 1990, 1991, 1994) works with a related notion of Accessibility in consciousness to account for anaphora in discourse. In order to develop pragmatic accounts of anaphora,

Prince (1981), Clark and his associates (Clark and Marshall 1981; Clark and Murphy 1982; Clark and Wilkes-Gibbes 1990), and Levinson (1987a, 1987b, 1991) all proposed hierarchies of referential expressions, where choice was determined by the Gricean Maxim of Quantity and related factors.

It slowly became clear that the determination of coreference was a discourse matter (Nunberg 1978; Reinhart 1983, 1986), and scholars of anaphora came to see syntactic binding within the sentence as *preventing* assignment of coreference within the discourse context (Lasnik 1976, 1981). Current theories of anaphora cover only bound variables within the (syntactic) binding theory; pronouns can act as bound variables only where they are syntactically bound (c-commanded), according to Reinhart (1983) and Reinhard and Reuland (1993). Otherwise, coreference is not established by syntactic binding; coreferencing is "just a subcase of the broader process of reference resolution" (Grodzinsky and Reinhart 1993: 77), which is a discourse-based process.

Tellingly, even the most "syntactic" of anaphoric relations, namely reflexivity, has been split into syntactic and discourse cases. As early as 1970 Ross noted that *myself* and *yourself* can occur without a sentential antecedent, thus requiring long-distance, that is discourse, interpretation; see also Kuno (1972, 1987) with examples from Japanese; Cantrall (1974) with examples from Ewe; and, for a summary, Zribi-Hertz (1989). Since then, long-distance reflexives, or *logophors*, have been described in several other languages, e.g. Icelandic (Mailing 1982), Italian (Giorgi 1983), and Norwegian (Hellan 1988). Accordingly, in sentence (2), the reflexive *herself* can be interpreted either as locally bound by and hence coreferential with *Sheila* or as logophorically coreferential with *Judy*:

(2) Judy wishes she had been able to instill in Sheila respect for herself.

Zribi-Hertz (1989: 703, 724) argues that "a grammatical theory of English reflexive pronouns cannot be complete without a discourse component," and moreover that "structural constraints such as the binding conditions might actually draw their motivation from discourse." Reinhart and Reuland (1993) have demonstrated that discourse reflexives must be distinguished as either point-of-view logophors, following Clements (1975) and Sells (1987), like that in example (2) above, or emphatic logophors for focus, following Kuno (1987), Zribi-Hertz (1989), and others, like that in example (3):

(3) The Joneses seem always to try and keep up with myself.

Thus the treatment of reflexivization in particular and of anaphora more generally illustrates the gradual shift from a syntactic to a discourse perspective on what was traditionally considered a semantic area of study.

3 Presupposition

Presupposition is also at heart a discourse or pragmatic notion, since the knowledge and beliefs of the speaker and the audience about things in the world are crucial in determining whether a sentence like the classic (4) makes sense: (4) The present king of France is bald.

For Russell (1905) and his followers (Sellars 1954; perhaps Donellan 1981) this sentence *entails* the existence of a particular individual, namely someone fitting the definite description "the present king of France." Hence the sentence counts as false in terms of truth-functional semantics – or perhaps simply false in any "possible world" in which there exists no king of France. By contrast, for Strawson and his (much more numerous) followers, existence does not count as a predicate at all. The existence of a present king of France amounts instead to a presupposition of sentence (4). In the absence of such a royal individual, the sentence simply fails to make any truth claim at all. For Strawson (1950) and his followers, the negation test for presuppositions is central: the presupposition that there is some current king of France adheres not only to sentence (4), but also to its negation (5):

(5) The present king of France is not bald.

Strawson later (1964) expressed concerns about some apparent counterexamples to his presupposition theory, saying that our intuitions about the truth or falsity of sentences containing definite descriptions may depend on discourse matters such as the topic of conversation. Thus in a discussion about the potential audience for this text, if I said the present king of France would be among its readers, I think most real readers would be prepared to call my claim flat out false rather than to say it lacked a truth value; see Donnellan (1981). Still, the notion of presupposition received into linguistics was that of Strawson's original objection to Russell's theory of definite descriptions (Russell 1910).

Early linguistic treatments of presupposition saw it as a semantic property of sentences (Katz 1977) and even of particular lexical items (McCawley 1968a, 1975; Kiparsky and Kiparsky 1970; Fillmore 1971a, 1971b). Thus, the verbs *murder* and *kill* both assert that the object ends up dead, but *murder* presupposes the act was intentional on the part of the subject; similarly, *assassinate* presupposes over and above *murder* that its object held political office. Also the (a) sentences in (6) and (7) might be said to presuppose the (b) sentences by virtue of the presence of the so-called factive predicates *regret* and *know*, whereas no such presuppositions are found for the otherwise parallel (c) sentences:

- (6) a. Judy regrets that she borrowed Roger's car.
 - b. Judy borrowed Roger's car.
 - c. Judy imagined that she borrowed Roger's car.
- (7) a. Roger knows that Judy borrowed his car.
 - b. Judy borrowed Roger's car.
 - c. Roger believes that Judy borrowed his car.

Fillmore (1971b) makes presuppositions part of the lexical entries for predicates: a "verb of judging" like *blame* is characterized as presupposing that the activity for which culpability is assigned is "bad," and even as presupposing selection restrictions such as that the normal subject is human; see also McCawley (1975) on "verbs of bitching" and their presuppositions.

But the semantic notion of presupposition held by Katz and Langendoen (1976), Fodor (1979), and Martin (1979) came under increasing attack by such scholars as Karttunen (1973), Kempson (1975), and Wilson (1975). Gazdar (1979) argued that no coherent semantic definition of presupposition was possible, and that we must replace it with a pragmatic account along the lines of Keenan (1971), Stalnaker (1972, 1973, 1974), Karttunen (1973), and Karttunen and Peters (1979), who cast their definitions in terms of appropriateness, assumptions and dispositions of speakers, and reasonable inferences by their audiences. Notice in this regard particularly the reflexive assumptions in Stalnaker's (1974) definition of pragmatic presupposition:

A proposition B is a **pragmatic presupposition** of a speaker **in** a given context just in case the speaker assumes or believes that B, assumes that his audience assumes or believes B, and assumes or believes that his audience recognizes that he is making these assumptions.

In this same spirit, most recent research tends to define presupposition in terms of reflective assumptions about knowledge shared by speakers and hearers (see e.g. Green 1989).

Many entailments or inferences first analyzed as presuppositions in the original philosophical semantic sense have come to be treated as implicata of various kinds (see Stalnaker 1973, 1978; Horn 1988), though Grice himself (1981) expresses doubts about analyzing the presuppositions of definite descriptions this way. But just how propositions end up as assumptions shared between speakers and their hearers – whether through presupposition or through implicature – is of less importance here than the fact that this whole area of meaning has come increasingly under the umbrella of discourse rather than truth-functional semantics.

4 Speech Acts

Since Austin (1962) described performative utterances as apparent declarative sentences with no truth-functional meaning as such, but instead with some illocutionary act potential, semantic theory has recognized for performatives a special discourse-based type of meaning. Searle's (1969, 1979) development of speech act theory enriched semantic theory in several parallel ways: he provided a functional classification of utterance types and interesting approaches to locutionary, illocutionary, and perlocutionary meaning. Speech act theory also offers a description of conditions for the successful performance of the different illocutionary acts, their so-called "felicity conditions." Finally, it proposes a model for deriving indirect meanings for utterances from their literal readings according to regular inferences, based on these felicity conditions.

Linguists reacted to speech act theory in several ways. Interest in the performative hypothesis by linguists led Ross (1970) and others (Cantrall 1974; Sadock 1974) to represent the pragmatic or discourse force of declarative sentences in (semantic) deep structure as a matrix sentence with the form *I tell you that*..., which spawned more work on contexts. Levinson (1983: 246–83) provides a history of the rise and fall of the performative hypothesis.

Generative semantics in effect tried to build discourse contexts into its deep syntactic analysis and trans-derivational constraints, for instance G. Lakoff (1970, 1971). Gordon and Lakoff (1975) argued that syntax requires a characterization of entailments in standardized contexts, and they proposed so-called "conversational postulates" to describe such entailments. Even though Green (1975), Morgan (1977), and others rejected conversational postulates on grounds that they were derivable from more general principles of inference, Gordon and Lakoff's proposal generated increased interest in contexts and ways to describe them.

In opposition to speech act theory, conversation analysis seeks to show that placement in the sequential organization of talk determines the force of an utterance. Even if one works from direct to indirect illocutionary force, placement will overrule both in concrete conversational contexts. Schegloff (1984, 1988) shows that apparent questions characteristically act as "pre-announcements." Thus, conversationalists tend to hear utterances like "Do you know who's going to that meeting?" as herolding an announcement. Only secondarily do they interpret such utterances as requests for an answer to the question of "Who's going." Moreover, the literal question about the hearer's knowledge seems to play no role at all. Speech act theory cannot develop a correct description of pre-sequences without taking sequentiality into account, and consequently does not offer a plausible model of conversational meaning, according to Schegloff. See Levinson (1983: 345–64) on the significance of pre-sequences generally.

Meanwhile, other semanticists were developing inferential approaches to meaning. Fodor (1975) argued for an inferential semantic theory versus the componential analysis of Katz (1972), while Bach and Harnish (1979) and Gazdar (1979) championed inferential models of meaning incorporating speech act theory and Gricean pragmatics. These attempts went along with an increasing awareness that the socalled "null context" posited by Katz and others in interpretive semantics was itself a special context or at least an invitation to image some context appropriate to the sentence in question.

5 Entailment

Areas of meaning like entailment divide less obviously into truth-functional semantic versus discourse areas. That *uncle* entails some feature like <male> and that *dead* entails <not alive> may be easily described within traditional structural semantics by means of so-called redundancy rules. Thus, sentence pairs like those in (8) and (9) can be recognized as logically sound within semantics alone:

- (8) a. Sue's uncle arrived late.b. Therefore, some male arrived late.
- (9) a. Judy has been dead for years.
 - b. Judy is no longer alive.

Other entailments, however – say, that *rob* entails <commit crime> and <punishable by prison term> – become quite cumbersome in any structural semantics. Such

entailments involve world knowledge over and above lexical information proper. Consequently, the characterization of the inferences from the (a) to the (b) sentences in the pairs below must be accomplished through some version of frame/script/ schema theory or the like:

- (10) a. Harry robbed a bank.
 - b. Hence Harry committed a crime.
- (11) a. Harry finally got out of prison last week.b. That's because he robbed a bank in 1980.

6 Interpersonal Meaning

The interpersonal meanings of repetition, parallelism, allusion, and formulaicity must also count as discourse phenomena, because they can only manifest themselves within some concrete context. Historically such effects have been considered in part under the rubrics of *poetics* or even *prosody*. Jakobson (1960) placed the poetic focus of language – language directed at the message itself – on a par with the other five foci, namely the referential, the expressive, the conative (directive), the phatic, and the metalingual. Even the sociolinguist Sacks (1992) found repeated occasion to comment on the poetics of natural conversation, particularly the synonym, antonym, and punning relations between words close to each other in conversation. Tannen's (1989) *Talking Voices* concerns itself centrally with the poetics of everyday talk through the notion of *involvement*, which collects such features of talk as dialogue, detail, repetition, and formulaicity; and Tannen pioneered the study of conversational poetics in showing how such features as tempo, repetition, parallelism, and simultaneous speech go into determining "conversational style" (1984).

But phenomena associated with affect or stylistic meaning have also received attention under the umbrella of interpersonal meaning, especially in the British school following Firth (1957) and Halliday (1967, 1977, 1978). For Gumperz (1982a, 1982b) and Tannen (1984) this sort of meaning is also collected under the headings of interactional cues and involvement: it affects the alignment of conversational participants and their interpersonal relationships. R. Lakoff (1973, 1977) is responsible for drawing attention to the importance of politeness, power, and solidarity in everyday talk; and work by Brown and Levinson (1978) and Tannen (1986) has made politeness theory a major approach to inferencing in discourse.

In this general area of interpersonal meaning, we find linguists beginning to look at such phenomena as formulaicity (Tannen 1987a, 1989), for example the use of proverbs to wrap up stories (Norrick 1985; Sacks 1992) and the use of allusion and parody in jokes and joking (Norrick 1989b, 1993). Concern with the functions of repetition illustrates the growing concern with language in real discourse contexts: thus Tannen (1987b), Norrick (1987), and other contributions to the special number of *Text* Johnstone edited on the topic describe the role of repetition in the production and understanding of talk, in the coherence and interpersonal meaning of conversation.

7 Figurative Meaning

The figurative meaning of hyperbole, irony, and some metaphors has sometimes also been seen as context bound, though early attempts to describe metaphor often remained solidly within sentence semantics proper. Thus Katz (1964) described a procedure for developing interpretations for grammatically deviant and anomalous "semi-sentences." Semi-sentences, including many figurative examples, receive interpretations based on their relations to nonanomalous sentences sharing properties with them. Further, Katz and Postal (1964) proposed a device for assigning features from predicates to proforms and semantically depleted items. Since the verb *drip* usually requires subject noun phrases characterized by the feature <(liquid)>, *drip* can also transfer the feature <(liquid)> to *something* in (12) in order to effect semantic congruency. Weinreich (1966) extended this device so as to transfer features to any noun at all. He proposed that the verb *bark* can trigger the transfer of the feature <(canine)> to its subject *the sergeant* in (13). This transfer models the metaphorical process whereby we see the sergeant in terms of a dog:

(12) Something dripped all over the new carpet.

(13) The sergeant barked his orders to the new recruits.

Fillmore (1971a, 1971b) proposed that selectional restrictions as presuppositions could transfer this same way to account for metaphors. Van Dijk (1972) revises Weinreich's analysis as a case of feature *extension* rather than transfer; Levin (1977) and Norrick (1985) suggest further modifications of Weinreich's original proposal to account for a wide range of figurative possibilities. Still, early on (Reddy 1969; Schofer and Rice 1977; Nunberg 1978) there were arguments that figurative language required discourse/pragmatic treatment along the lines of contextual reference, or that metaphor represented a "performance phenomenon" outside the purview of semantics proper, for instance Cohen and Margalit (1972), Price (1974), and Abraham (1975). If sufficiently powerful interpretive strategies are independently required at the discourse level, they could eliminate the need for any narrowly conceived semantic rules for figures.

Nevertheless, many recent linguistic treatments of metaphor follow G. Lakoff's cognitive linguistic approach (G. Lakoff and Johnson 1980; G. Lakoff 1987; G. Lakoff and Turner 1989; Kövecses 1990; Sweetser 1990). Other approaches center on figurative meanings as implicatures from violations of Grice's maxims or similar principles (Grice 1978; Sperber and Wilson 1981, 1986). Still, neither of these approaches focuses on figures in concrete conversational contexts. By contrast, I would argue that the close analysis of figurative utterances in natural discourse contexts can provide evidence for real psychological strategies of interpretation.

We should note first that metaphors technically appear only at the discourse level; thus whereas a sentence like (14) will tend to provoke a nonliteral interpretation for the verb *dance* in most real-world contexts, it certainly does not force figurative

interpretation, since it could apply literally to a scene from a cartoon, where anthropomorphized boats with legs indeed dance to appropriate background music:

(14) The colorful fishing boats danced in the harbor.

All we know about (14) as a disembodied sentence is that it contains an incongruity between the subject *boats* and the verb *dance* which will presumably receive resolution in its discourse context. Other sentences like (15) are perfectly consistent within themselves:

(15) The early bird catches the worm.

They trigger metaphorical interpretation only when they appear in contexts such as talk of the stock market, but not in talk about avian dietary habits – pace Matthews (1971), Katz (1964), and others who claim metaphor always involves selectional clashes. Similarly, hyperbole and irony are bound to discourse, since there is nothing intrinsic to sentences like (16) and (17) which marks them as necessarily involving overstatement or sarcasm:

- (16) I have about a thousand calls to answer by noon.
- (17) This is the kind of weather I like best.

It is the utterance of (16) to a colleague at 11.45 a.m. which makes it sound like an exaggeration, and the utterance of (17) during a downpour which makes it sound sarcastic.

8 Metalingual Perspectives on Figurative Meaning

Although we cannot directly observe the cognitive processing people go through when confronted with figures of speech, we do have access to several sorts of data which shed light on the process, namely the clarifications, corrections, and explicit metalingual comments in everyday talk. We can observe reactions of interlocutors to intentionally produced figures and to other incongruities which arise in conversation; and we can examine the verbal attempts conversationalists make to explain the apparent incongruities and outright contradictions in their own speech. When certain types of comments and attempts at clarification recur, they can claim a psychological reality as processing strategies which no proposed semantic rule shares. Moreover, they represent patterns which must be part of discourse competence in any case, so that it only makes good sense to see how far they go toward describing figurative meaning as well.

Since metaphor is not generally perceived as discourse incongruency the way contradiction is, we must glean what insight we can from "metalingual" comments about contradictions, then see what mileage we can derive from them for the analysis of metaphor. Talk counts as metalingual in the sense of Jakobson (1960) when it aims at questioning and clarifying linguistic forms and their meanings. Metalingual talk allows conversationalists to focus on the appropriateness of a word or turn of phrase - and hence, it helps them to negotiate the sort of meaning appropriate to their particular interaction. Jakobson's classic treatment of language functions leaves the impression that relatively few utterances exhibit primarily metalingual force. But thirty years of increasingly intense research on naturally occurring conversation have shown that quite a lot of everyday talk is directed at language forms themselves: we are at pains to agree on names and terminology; we work to clarify errors, contradictions, and misunderstandings; we negotiate grammar and meaning, turn-taking and topic choice; we take note of apt phrases, while we poke fun at inept phrasing and outgroup (nonstandard) forms. See, for instance, Jefferson (1974), Schegloff (1987, 1988), and Schegloff et al. (1977) on misunderstanding and repair; M. H. Goodwin (1983), Ochs (1984), and Norrick (1991a) on correction and clarification; Tannen (1984, 1986) on reframing; Clark and Wilkes-Gibbs (1990) and Clark (1997) on negotiating reference. Certainly, the analysis of metalingual comments in everyday conversation can yield valuable input for any semantic theory.

The examination of metalingual talk to resolve incongruity in discourse reveals three patterns, which can be represented as operations on conflicting frames of reference of the sort Hrushovski (1984) proposes for the analysis of metaphor (see Norrick 1989a, 1991b). While metaphors oppose a literal and a figurative frame of reference, contradictions and paradoxes oppose two frames of reference on the same literal level. Yet the strategies themselves apply to metaphors in parallel ways. To see how the resolution of discourse contradiction illustrates the first of the three recurrent strategies identified, consider the following excerpt from Svartvik and Quirk (1980: 664). Here a contradiction arises through the conjunction of two adjacent utterances, the second of which is spoken rapidly as an attempt at correction, rather than with contrastive stress as the second part of a single utterance:

- (18) *B*: but it was in the middle of this Dubrovniki Garden. which is a very overgrown kind of a garden. I mean it's not overgrown.
 - A: Yeah?
 - *B*: but things start off. with plenty of space between them. on the ground.
 - A: Yes?
 - *B*: but when they get up to the sort of foliage level.
 - A: (laughs)
 - *B*: they're all sort of interlinked.

In this passage, the speaker explains his contradictory statement at some length, apparently prodded by his hearer's repeated questioning. Speaker B resolves the contradiction he has produced by distinguishing two ways a garden can be overgrown. In doing so, he illustrates a common strategy of interpreting incongruity, which I call "separating frames of reference" (cf. Norrick 1985, 1989a). This strategy regularly applies to statements like *Sue's both right and wrong* to get a consistent interpretation such as, say "Sue is right theoretically and wrong practically"; Leech (1969) and Kiefer (1978) identify only this sort of interpretation for contradictory utterances.

In a second example from natural conversation (Craig and Tracy 1983: 320), speaker K shows with her *but*, *ah*, *so* that she realizes something has gone awry with her utterance:

- (19) *K*: they don't really get a lot of snow. Like they got more than we did so far but, ah, so.
 - *B*: This is an exceptional year I hear.
 - *K*: Well they usually get about as much as we do.

In observing that the current year was exceptional, B already begins to relativize the clashing terms, then K goes on to find middle ground between them. She generalizes from this year to *usually*, and averages the two extremes of the contradiction with *about as much as*. We all employ this second strategy – call it "averaging opposites" – when we interpret a statement like *It's raining and it's not* to mean "it is just barely raining," and hence "it is drizzling." Here, clearly, we seek to coalesce entire frames of reference, rather than isolated lexical items.

The third major strategy speakers use to explain contradictory utterances takes one of the clashing terms as correct, and brings the other term into line with it. In responding to R's question in the example below (from Jefferson 1972: 337), K follows just this strategy of "modifying one term": he resolves the apparent contradiction R identifies by explaining what *can't dance* entails for him.

- (20) *K*: I can't dance, and hell every time, every time the the dance play er every time there's a dance I'm always at it, an' I'm always dancin',
 - *R*: An' yer al yer dancing?
 - *K*: Sure. I can't dance worth shit, I just move around hehh's all you gotta do.

We all employ this third strategy in finding consistent interpretations for statements like *Al is thirty-five going on twenty*, when we alter the second term to "acts like he's going on twenty."

Only the three foregoing strategies recur regularly in the cases of conversational incongruity I have identified in the literature on correction and clarification as well as in my own taped data. Furthermore, they seem to account for standard examples of intentionally crafted paradoxes, as I have shown in earlier work on proverbs (1985), proverbial phrases (1989c), and literary paradoxes (1989a). Hence these strategies should be included in complete semantics for discourse. Significantly, this sort of result seems obtainable only by direct reference to explaining and correcting behavior in real situated conversation.

Let us examine a final example of figurative meaning in natural conversation. Hearers do not usually remark explicitly on metaphors beyond an appreciative chuckle; the complimentary comment in the excerpt below comes only in response to an image of a rudderless boat, which summarizes the foregoing description in rather bold fashion. Mel, a professor of business, produces the figure during an interview about student writing assignments with Lou, a consultant on professional writing:

(21) *Mel*: None of these others maybe had a *stated* objective as to what they were trying to accomplish, but this is the only one that just seems to be kind of

adrift. The other ones- came to a conclusion. Even though you didn't know what they were trying to decide up *front*, at least there was a wrap-up saying, buy this, or sell that, or: invest in this, or this is a good project, or that's a bad project, or something ha ha ha ha hunh. This just doesn't seem to be going anywhere. It's kind of like a rudderless boat.

Lou: You're a good metaphor-maker.

Mel: (laughs)

Notice that the word *adrift* and the phrase *doesn't seem to be going anywhere* have already suggested a metaphor of aimless movement on the water, though their imagery is conventional and faded; the explicit image of the rudderless boat serves to focus this metaphor emerging in the preceding passage. Although Mel's phrase "like a rudderless boat" strictly counts as a simile rather than a metaphor in traditional parlance because of the explicit comparison with *like*, we know thanks to Ortony (1979a, 1979b) that similes themselves are metaphorical to greater or lesser degrees. With or without *like*, the image of the rudderless boat requires the same cognitive processing to relate it to the student writing assignment in question. An instinctive awareness of this nonliteral meaning is marked by hedges such as kind of attached to the faded metaphor adrift. The hedges and Mel's rather embarrassed laughter show that he is somewhat reticent to have his metaphor noticed, while Lou's comment reveals a metalingual awareness of figurative language. The whole passage nicely illustrates how a speaker can use an explicit simile to bring out the metaphoric possibilities inherent in foregoing talk. Finally, the presence of *adrift* and *doesn't seem to be going anywhere* in the environment of the image of the rudderless boat point us in promising directions for its interpretation. By the strategy of modifying one term, we can generalize the rudderless boat to any undertaking without a fixed orientation toward its goal; and by the strategy of separating frames of reference, we can recognize that the comparison with a rudderless boat counts only for this abstract sense and not in any real frame of reference involving wooden vessels on water. This discussion illustrates the value of examining metaphors in their real-life conversational contexts for an understanding of their meaning potential, as well as to describe how speakers embed them in ongoing talk and how hearers react to them.

9 Conclusion

I hope the foregoing illustrates how linguistic analysis has become increasingly oriented toward discourse in recent years, and how this reorientation has detected new problems and discovered new solutions to old ones. The examination of discourse can reveal the working of interpretive strategies which obviate the need for narrowly semantic or syntactic explanations; including such independently motivated discourse strategies builds psychological reality into our linguistic descriptions and renders them more adequate to real linguistic behavior. Finally, investigation of utterances in their natural discourse contexts makes us appreciate the interrelations of the semantic phenomena we attempt to analyze into the separate species of referential, ideational, interpersonal, and affective meaning.

REFERENCES

- Abraham, Werner (1975) *A Linguistic Approach to Metaphor*. Lisse: de Ridder.
- Ariel, Mira (1988) Referring and accessibility. *Journal of Linguistics*, 24(1): 65–87.
- Ariel, Mira (1990) Accessing Noun-phrase Antecedents. London: Routledge.

Ariel, Mira (1991) The function of accessibility in a theory of grammar. *Journal of Pragmatics*, 16: 443–63.

- Ariel, Mira (1994) Interpreting anaphoric expressions: a cognitive versus a pragmatic approach. *Journal of Linguistics*, 30: 3–42.
- Austin, John (1962) *How to Do Things with Words*. Cambridge, MA: Harvard University Press.
- Bach, Kent and Harnish, Robert M. (1979) *Linguistic Communication and Speech Acts*. Cambridge, MA: MIT Press.
- Bar-Hillel, Yehoshua (1954) Indexical expressions. *Mind*, 63: 359–79.
- Bloomfield, Leonard (1933) Language. New York: Holt.
- Bréal, Michel (1883) *Les lois intellectuelles du langage*. L'annuaire de l'association pour l'encouragement des études grecques en France.
- Bréal, Michel (1897) *Essai de sémantique: Science des significations*. Paris: Librairie Hachette.
- Bréal, Michel (1900) Semantics: Studies in the Science of Meaning. New York: Dover.
- Brown, Penelope and Levinson, Stephen (1978) Universals in language usage: politeness phenomena. In E. N.
 Goody (ed.), *Questions and Politeness*, Cambridge: Cambridge University Press, 56–290. [Reissued as: *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press, 1987.]

Cantrall, William (1974) View Point, Reflexives and the Nature of Noun Phrases. The Hague: Mouton.

Chafe, Wallace (1968) Idiomaticity as an anomaly in the Chomskyan paradigm. *Foundations of Language*, 4: 109–27.

- Chafe, Wallace (1970) *Meaning and the Structure of Language*. Chicago: University of Chicago Press.
- Chafe, Wallace (1974) Language and consciousness. *Language*, 50: 111–33.
- Chafe, Wallace (1993) *Discourse, Consciousness, and Time*. Chicago: University of Chicago Press.
- Chastain, Charles (1975) Reference and context. In K. Gunderson (ed.), *Language, Mind, and Knowledge*.Minneapolis: University of Minnesota Press, 194–269.
- Chomsky, Noam (1973) Conditions on transformations. In S. Anderson and P. Kiparsky (eds), A Festschrift for Morris Halle. New York: Holt, 232–86.
- Chomsky, Noam (1981) *Lectures on Government and Binding*. Dordrecht: Foris.
- Christophersen, Paul (1939) *The Articles: A Study of their Theory and Use in English.* Copenhagen: Einar Munksgaard.
- Clark, Herbert H. (1997) Dogmas of understanding. *Discourse Processes*, 23: 567–98.
- Clark, Herbert H. and Marshall, Catherine R. (1981) Definite reference and mutual knowledge. In A. K. Joshi, B. L. Webber, and I. A. Sag (eds), *Elements of Discourse Understanding*. Cambridge: Cambridge University Press, 10–63.
- Clark, Herbert H. and Murphy, Gregory L. (1982) Audience design in meaning and reference. In J. F. Le Ny and W. Kintsch (eds), *Language and Comprehension*. Amsterdam: North-Holland, 287–99.

- Clark, Herbert H. and Wilkes-Gibbs, W. (1990) Referring as a collaborative process. In P. R. Cohen, J. Morgan and M. E. Pollack (eds), *Intentions in Communication*. London: MIT Press, 463–93.
- Clements, George N. (1975) The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Languages*, 10: 141–77.
- Cohen, L. Jonathan and Margalit, Avishai (1972) The role of inductive reasoning in the interpretation of metaphor.
 In D. Davidson and G. Harman (eds), *Semantics of Natural Language*.
 Dordrecht: Reidel, 722–40.
- Cole, Peter (1978) On the origins of referential opacity. In P. Cole (ed.), *Syntax and Semantics, vol. 9: Pragmatics.* New York: Academic, 1–22.
- Craig, Robert T. and Tracy, Karen (eds) (1983) *Conversational Coherence*. Beverly Hills: Sage.
- Donnellan, Keith S. (1978) Speaker reference, descriptions and anaphora.
 In P. Cole (ed.), Syntax and Semantics, vol. 9: Pragmatics. New York: Academic, 47–68.
- Donnellan, Keith S. (1981) Intuitions and presuppositions. In P. Cole (ed.), *Radical Pragmatics*. New York: Academic, 129–42.
- Duranti, Alessandro (1986) The audience as co-author: an introduction. *Text*, 6: 239–47.
- Fillmore, Charles J. (1971a) Verbs of judging. In C. J. Fillmore and D. T. Langendoen (eds), *Studies in Linguistic Semantics*. New York: Holt, 273–89.
- Fillmore, Charles J. (1971b) Types of lexical information. In D. D. Steinberg and L. A. Jakobovits (eds), Semantics: An Interdisciplinary Reader in Philosophy, Linguistics and Psychology. New York: Holt, 370–92.
- Fillmore, Charles J. (1976) The need for a frame semantics within linguistics. *Statistical Methods in Linguistics*: 5–29.

- Fillmore, Charles J. (1985) Frames and the semantics of understanding. *Quaderni di Semantica: Rivista Internazionale di Semantica Teorica e Applicata*, 6: 222–54.
- Firth, John R. (1957) Papers in Linguistics, 1934–1951. London: Oxford University Press.
- Fodor, Jerry D. (1975) *Language of Thought*. New York: Crowell.
- Fodor, Jerry D. (1979) In defense of the truth-value gap. In C. K. Oh and D. Dinneen (eds), Syntax and Semantics, vol. 11: Presupposition. New York: Academic, 199–224.
- Frege, Gottlob (1892) Über Sinn und Bedeutung. Zeitschrift für Philosophie und philosophische Kritik, 100: 25–50.
 [Translated in: P. T. Geach and M. Black (eds) (1952) Philosophical Writings. Oxford: Blackwell, 17–38.]
- Gazdar, Gerald (1979) A solution to the projection problem. In C. K. Oh and D. Dineen (eds), *Syntax and Semantics*, *vol. 11: Presupposition*. New York: Academic, 57–89.
- Giorgi, Alexandra (1983) Toward a theory of long distance anaphors: A GB approach. *Linguistic Review*, 3: 307–61.
- Givón, Talmy (1973) Opacity and reference in language: an inquiry into the role of modalities. In J. Kimball (ed.), *Syntax and Semantics, vol. 2.* New York: Academic Press, 95–122.
- Givón, Talmy (1982) Logic vs. pragmatics, with human language as the referee: toward an empirically viable epistemology. *Journal of Pragmatics*, 6: 81–133.
- Givón, Talmy (1985) The pragmatics of referentiality. In D. Schiffrin (ed.), Meaning, Form and Use in Context (Georgetown University Roundtable on Languages and Linguistics 1984). Washington, DC: Georgetown University Press, 120–38.
- Goodwin, Charles (1986) Audience diversity, participation and interpretation. *Text*, 6: 283–316.

- Goodwin, Majorie H. (1983) Aggravated correction and disagreement in children's conversations. *Journal* of *Pragmatics*, 7: 657–77.
- Gordon, David and Lakoff, George (1975) Conversational postulates. In P. Cole and J. Morgan (eds), *Syntax and Semantics, vol. 3: Speech Acts.* New York: Academic, 83–106.
- Green, Georgia M. (1975) How to get people to do things with words: the whimperative question. In P. Cole and J. Morgan (eds), *Syntax and semantics, vol. 3: Speech Acts.* New York: Academic Press, 107–42.
- Green, Georgia M. (1989) *Pragmatics and Natural Language Understanding*. Hillsdale, NJ: Erlbaum.
- Green, Georgia M. (1996) Ambiguity resolution and discourse interpretation. In K. van Deemter and S. Peters (eds), Semantic Ambiguity and Underspecification. Stanford: CSLI, 1–26.
- Green, Georgia M. and Morgan, Jerry L. (1981) Pragmatics, grammar, and discourse. In P. Cole (ed.), *Radical Pragmatics*. New York: Academic, 167–81.
- Grice, H. Paul (1957) Meaning. Philosophical Review, 66: 377–88.
- Grice, H. Paul (1975) Logic and conversation. In P. Cole and J. Morgan (eds), Syntax and Semantics, vol. 3: Speech Acts. New York: Academic, 41–58.
- Grice, H. Paul (1978) Further notes on logic and conversation. In P. Cole (ed.), Syntax and Semantics, vol. 9: Pragmatics. New York: Academic, 113–27.
- Grice, H. Paul (1981) Presupposition and conversational implicature. In P. Cole (ed.), *Radical Pragmatics*. New York: Academic Press, 183–98.
- Grodzinsky, Yosef and Reinhart, Tanya (1993) The innateness of binding and coreference. *Linguistic Inquiry*, 24: 69–101.

- Gumperz, John J. (1982a) *Discourse Strategies*. Cambridge: Cambridge University Press.
- Gumperz, John J. (1982b) The linguistic bases of communicative competence. In D. Tannen (ed.), Analyzing Discourse: Text and Talk (Georgetown University Roundtable on Languages and Linguistics 1981). Washington, DC: Georgetown University Press, 323–34.
- Halliday, M. A. K. (1967) Notes an transitivity and theme in English: Part 2. *Journal of Linguistics*, 3: 199–244.
- Halliday, M. A. K. (1977) Text as semantic choice in social contexts. In T. A. van Dijk and J. S. Petöfi (eds), *Grammars* and Descriptions. Berlin: de Gruyter, 176–225.
- Halliday, M. A. K. (1978) Language as Social Semiotic. London: Arnold.
- Hawkins, John A. (1978) *Definiteness and Indefiniteness: A Study in Reference and Grammaticality Prediction*. London: Croom Helm.
- Harman, Gilbert (1977) Against universal semantic representation. In A. Rogers,
 B. Wall, and J. P. Murphy (eds), *Proceedings of the Texas Conference on Performatives, Presuppositions, and Implicatures*. Arlington: Center for Applied Linguistics, 1–11.
- Heim, Irene (1983) File change semantics and the familiarity theory of definiteness. In R. Bäuerle, C. Schwarze, and A. von Stechow (eds), *Meaning*, *Use and Interpretation of Language*. Berlin: de Gruyter, 164–89.
- Hellan, Lars (1988) *Anaphora in Norwegian and the Theory of Grammar*. Dordrecht: Foris.
- Horn, Lawrence R. (1984) Toward a new taxonomy for pragmatic inference:
 Q-based and R-based implicature. In
 D. Schiffrin (ed.), Meaning, Form and Use in Context (Georgetown University Roundtable on Languages and Linguistics

1984). Washington, DC: Georgetown University Press, 11–42.

- Horn, Lawrence R. (1988) Pragmatic theory. In F. J. Newmeyer (ed.), *Linguistics: The Cambridge Survey*. Cambridge: Cambridge University Press, 113–45.
- Hrushovski, Benjamin (1984) Poetic metaphor and frames of reference. *Poetics Today*, 5: 5–43.
- Jackendorff, Ray S. (1972) Semantic Interpretation in Generative Grammar. Cambridge, MA: MIT Press.
- Jakobson, Roman (1960) Closing statement: linguistics and poetics. In T. A. Sebeok (ed.), *Style in Language*. Cambridge, MA: MIT Press, 350–77.
- Jefferson, Gail (1972) Side sequences. In D. Sudnow (ed.), *Studies in Social Interaction.* New York: Free Press, 294–338.
- Jefferson, Gail (1974) Error correction as an interactional resource. *Language in Society*, 3: 181–99.
- Jesperson, Otto (1924) The Philosophy of Grammar. London: Allen and Unwin.
- Kamp, Hans (1981) A theory of truth and semantic representation. In
 J. A. G. Groenendijk, T. Janssen, and
 M. Stokhof (eds), *Formal Methods in the Study of Language*. Amsterdam: Mathematisch Centrum, 277–322.
- Karttunen, Lauri (1973) Presuppositions of compound sentences. *Linguistic Inquiry*, 4: 169–93.
- Karttunen, Lauri (1976) What indirect questions conventionally implicate. In S. Mufwene, C. Walker, and S. Steever (eds), *Papers from the Twelfth Regional Meeting of the Chicago Linguistic Society*: 351–68.
- Karttunen, Lauri and Peters, Stanley (1979) Conventional implicature.
 In C. K. Oh and D. Dinneen (eds), Syntax and Semantics: Presupposition.
 New York: Academic Press, 1–56.
- Katz, Jerrold J. (1964) Semi-sentences. In J. Fodor and J. J. Katz (eds),

The Structure of Language: Readings in the Philosophy of Language. Englewood Cliffs, NJ: Prentice-Hall, 400–416.

- Katz, Jerrold J. (1966) *The Philosophy of Language*. New York: Harper and Row.
- Katz, Jerrold J. (1972) *Semantic Theory*. New York: Harper and Row.

Katz, Jerrold J. (1977) *Propositional Structure and Illocutionary Force.* Hassocks: Harvester.

- Katz, Jerrold J. and Fodor, Jerry A. (1963) The structure of a semantic theory. *Language*, 39: 170–210.
- Katz, Jerrold J. and Langendoen, Terry D. (1976) Pragmatics and presupposition. *Language*, 52: 1–17.
- Katz, Jerrold J. and Postal, Paul M. (1964) An Integrated Theory of Linguistic Descriptions. Cambridge, MA: MIT Press.
- Keenan, Edward (1971) Two kinds of presupposition in natural language.
 In C. Fillmore and D. T. Langendoen (eds), *Studies in Linguistic Semantics*.
 New York: Holt, Rinehart and Winston, 45–52.
- Kempson, Ruth M. (1975) *Presupposition and the Delimitation of Semantics*. Cambridge: Cambridge University Press.
- Kiefer, Ferenc (1978) Zur Rolle der Pragmatik in der linguistischen Beschreibung. *Die Neueren Sprachen*, 77: 254–68.
- Kiparsky, Carol and Kiparsky, Paul (1970) Fact. In M. Bierwisch and K. E. Heidolph (eds), *Progress in Linguistics*. The Hague: Mouton, 143–73.
- Kövecses, Zoltán (1986) Metaphors of Anger and Pride. Philadelphia: John Benjamins.
- Kövecses, Zoltán (1990) Emotion Concepts. New York: Springer.
- Kuno, Susumu (1972) Pronominalization, reflexivization, and direct discourse. *Linguistic Inquiry*, 3: 269–320.

Kuno, Susumu (1987) Functional Syntax: Anaphora, Discourse and Empathy. Chicago: University of Chicago Press.

Labov, William (1984) Intensity. In D. Schiffrin (ed.), Meaning, Form, and Use in Context (Georgetown University Roundtable on Languages and Linguistics 1984). Washington, DC: Georgetown University Press, 43–70.

Lakoff, George (1969) Presupposition and relative grammaticality. *Journal of Philosophical Linguistics*, 1: 103–16.

Lakoff, George (1970) Global rules. Language, 46: 627–39.

Lakoff, George (1971) On generative semantics. In D. D. Steinberg and L. A. Jakobovits (eds), *Semantics: An Interdisciplinary Reader*. New York: Cambridge University Press, 232–96.

Lakoff, George (1987) Women, Fire and Dangerous Things. Chicago: University of Chicago Press.

Lakoff, George and Johnson, Mark (1980) *Metaphors We Live By.* Chicago: University of Chicago Press.

Lakoff, George and Turner, Mark (1989) More than Cool Reason: A Field Guide to Poetic Metaphor. Chicago: University of Chicago Press.

Lakoff, Robin (1973) The logic of politeness; or, minding your p's and q's. Papers from the Ninth Regional Meeting of the Chicago Linguistic Society: 292–305.

Lakoff, Robin (1977) What you can do with words: politeness, pragmatics, and performatives. In A. Rogers,
B. Wall and J. P. Murphy (eds), Proceedings of the Texas Conference on Performatives, Presuppositions and Implicatures. Washington, DC: Center for Applied Linguistics, 79–105.

Langacker, Ronald W. (1969) On pronominalization and the chain of command. In D. A. Reibel and S. A. Schane (eds), *Modern Studies in English.* Englewood Cliffs, NJ: Prentice-Hall, 160–86. Lasnik, Howard (1976) Remarks on coreference. *Linguistic Analysis*, 2: 1–22.

Lasnik, Howard (1981) On two recent treatments of disjoint reference. *Journal of Linguistic Research*, 1: 48–58.

Leech, Geoffrey N. (1969) Towards a Semantic Description of English. London: Longman.

Lees, Robert B. and Klima, Edward S. (1963) Rules for English pronominalization. *Language*, 48: 17–28.

Lehrer, Adrienne (1983) *Wine and Conversation*. Bloomington: Indiana University Press.

Levin, Samuel R. (1977) *The Semantics of Metaphor*. Baltimore: Johns Hopkins University Press.

Levinson, Stephen C. (1983) *Pragmatics*. Cambridge: Cambridge University Press.

Levinson, Stephen C. (1987a)
Minimization and conversational interference. In J. Verschueren, and
M. Bertuccelli-Papi (eds), The Pragmatic Perspective: Proceedings of the International Pragmatics Conference.
Viareggio, 1985. Amsterdam: John Benjamins, 61–129.

Levinson, Stephen C. (1987b) Pragmatics and the grammar of anaphora: a partial pragmatic reduction of binding and control phenomena. *Journal of Linguistics*, 23: 379–434.

Levinson, Stephen C. (1991) Pragmatic reduction of the binding conditions revisited. *Journal of Linguistics*, 27: 107–61.

Mailing, Joan (1982) Non-clause-bounded reflexives in Icelandic. In T. Fretheim and L. Hellan (eds), *Papers from the Sixth Scandinavian Conference of Linguistics*. Trondheim: Tapir, 90–106.

Malinowski, Bronislaw (1923) The problem of meaning in primitive languages. In C. K. Ogden and I. A. Richards, *The Meaning of Meaning*. London: Routledge, 296–336. Malinowski, Bronislaw (1935) Coral Gardens and their Magic. London: Allen and Unwin.

Martin, John N. (1979) Some misconceptions in the critique of semantic presuppositions. *Theoretical Linguistics*, 6: 235–82.

Matthews, Robert J. (1971) Concerning a "linguistic theory" of metaphor. *Foundations of Language*, 7: 413–25.

McCawley, James D. (1968a) The role of semantics in a grammar. In E. Bach and R. Harms (eds), *Universals in Linguistic Theory*. New York: Holt, 124–69.

McCawley, James D. (1968b) Lexical insertion in a transformational grammar without deep structure. Papers from the Fourth Regional Meeting of the Chicago Linguistic Society: 71–80.

McCawley, James D. (1968c) Concerning the base component of a transformational grammar. *Foundations of Language*, 4: 243–69.

McCawley, James D. (1970) Where do noun phrases come from? In R. A. Jacobs and P. S. Rosenbaum (eds), *Readings in English Transformational Grammar*. Boston: Ginn, 166–83.

McCawley, James D. (1975) Verbs of bitching. In D. Hockney (ed.), *Contemporary Research in Philosophical Logic and Linguistic Semantics*. Dordrecht: Reidel, 313–32.

Montague, Richard (1968) Pragmatics. In R. Klibansky (ed.), *Contemporary Philosophy*. Florence: La Nouva Italia Editrice, 102–21.

Montague, Richard (1970) Pragmatics and intensional logic. *Synthese*, 22: 68–94.

Montague, Richard (1974) Formal Philosophy: Selected Papers of Richard Montague. New Haven: Yale University Press.

Morgan, Jerry L. (1977) Conversational postulates revisited. *Language*, 53: 277–84. Norrick, Neal R. (1985) *How Proverbs Mean*. Berlin: Mouton.

Norrick, Neal R. (1987) Functions of repetition in conversation. *Text*, 7: 245–64.

Norrick, Neal R. (1989a) How paradox means. *Poetics Today*, 10: 51–62.

Norrick, Neal R. (1989b) Intertextuality in humor. *Humor*, 2: 117–39.

Norrick, Neal R. (1989c) Proverbial paradox. *Proverbium*, 6: 67–73.

Norrick, Neal R. (1991a) On the organization of corrective exchanges in conversation. *Journal of Pragmatics*, 16: 58–83.

Norrick, Neal R. (1991b) Contradiction and paradox in discourse. In J. Verschueren (ed.), *Levels of Linguistic Adaptation*. Amsterdam: John Benjamins, 195–202.

Norrick, Neal R. (1993) *Conversational Joking: Humor in Everyday Talk.* Bloomington: Indiana University Press.

Nunberg, Geoffrey D. (1978) *The Pragmatics of Reference*. Bloomington: Indiana University Linguistics Club.

Ochs, Elinor (1984) Clarification in culture. In D. Schiffrin (ed.), Meaning, Form, and Use in Context (Georgetown University Roundtable on Languages and Linguistics 1984). Washington, DC: Georgetown University Press, 325–41.

Ogden, C. K. and Richards, I. A. (1923) *The Meaning of Meaning*. London: Routledge.

Ortony, Andrew (1979a) Beyond literal simile. *Psychological Review*, 86: 161–80.

Ortony, Andrew (1979b) The role of similarity in similes and metaphors. In A. Ortony (ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 186–201.

Price, J. T. (1974) Linguistic competence and metaphorical use. *Foundations of Language*, 11: 253–56.

- Prince, Ellen (1981) Towards a taxonomy of given–new information. In P. Cole (ed.), *Radical Pragmatics*. New York: Academic Press, 223–56.
- Reddy, Michael J. (1969) A semantic approach to metaphor. *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*: 240–51.
- Reinhart, Tanya (1983) Anaphora and Semantic Interpretation. London: Croom Helm.
- Reinhart, Tanya (1986) Center and periphery in the grammar of anaphora. In B. Lust (ed.), *Studies in the Acquisition of Anaphora*. Dordrecht: Reidel, 123–50.
- Reinhart, Tanya and Reuland, Eric J. (1993) Reflexivity. *Linguistic Inquiry*, 24: 697–720.
- Ross, John Robert (1970) On declarative sentences. In R. A. Jabobs and
 P. Rosenbaum (eds), *Readings in English Transformational Grammar*. Waltham: Ginn, 222–72.
- Russell, Bertrand (1905) On denoting. *Mind*, 14: 479–93.
- Russell, Bertrand (1910) *Principia Mathematica*. Cambridge: Cambridge University Press.
- Sacks, Harvey (1992) *Lectures on Conversation*, 2 vols. Oxford: Blackwell.
- Sadock, Jerrold M. (1974) *Toward a Linguistic Theory of Speech Acts.* New York: Academic.
- Sapir, Edward (1921) *Language: An Introduction to the Study of Speech.* New York: Harcourt, Brace and World.
- Sapir, Edward (1929) The status of linguistics as a science. *Language*, 5: 207–14. [Reprinted in Sapir 1949: 160–6.]
- Sapir, Edward (1949) Selected Writings of Edward Sapir in Language, Culture, and Personality. Berkeley: University of California Press.
- Saussure, Ferdinand de (1916) *Cours de linguistique générale*. Paris: Payot.

- Schegloff, Emanuel A. (1984) On some questions and ambiguities in conversation. In J. M. Atkinson, and J. Hevitage (eds), *Structure of Social Action*. Cambridge: Cambridge University Press, 29–52.
- Schegloff, Emanuel A. (1987) Some source of misunderstanding in talk-in-interaction. *Linguistics*, 25: 201–18.
- Schegloff, Emanuel A. (1988) Presequences and indirection: applying speech act theory to ordinary conversation. *Journal of Pragmatics*, 12: 55–62.
- Schegloff, Emanuel A., Jefferson, Gail, and Sacks, Harvey (1977) The preference for self-correction in the organization of repair in conversation. *Language*, 53: 361–82.
- Schofer, Peter and Rice, Donald (1977) Metaphor, metonymy, and synechdoche revis(it)ed. *Semiotica*, 21: 121–49.
- Searle, John R. (1969) *Speech Acts*. Cambridge: Cambridge University Press.
- Searle, John R. (1979) *Expression and Meaning*. Cambridge: Cambridge University Press.
- Sellars, Wilfried (1954) On presupposing. *Philosophical Review*, 63: 197–215.
- Sells, Peter (1987) Aspects of logophoricity. *Linguistic Inquiry*, 18: 445–81.
- Sperber, Dan and Wilson, Deidre (1981) Irony and the use-mention distinction. In P. Cole (ed.), *Radical Pragmatics*. New York: Academic, 295–318.
- Sperber, Dan and Wilson, Deidre (1986) *Relevance: Communication and Cognition.* Cambridge: Harvard University Press.
- Stalnaker, Robert C. (1972) Pragmatics. In D. Davidson and G. Harman (eds), Semantics of Natural Language. Dordrecht: Reidel, 380–97.
- Stalnaker, Robert C. (1973) Presuppositions. Journal of Philosophical Logic, 2: 447–57.

- Stalnaker, Robert C. (1974) Pragmatic presuppositions. In M. K. Munitz and P. K. Unger (eds), Semantics and Philosophy. New York: New York University Press, 197–214.
- Stalnaker, Robert C. (1978) Assertion. In P. Cole (ed.), Syntax and Semantics, vol. 9: Pragmatics. New York: Academic, 315–32.
- Stern, Gustaf (1931) *Meaning and the Change of Meaning*. Bloomington: Indiana University Press.
- Strawson, Peter (1950) On referring. Mind, 59: 320–44.
- Strawson, Peter (1964) Identifying reference and truth values. *Theoria*, 30: 96–118.
- Svartvik, Jan and Quirk, Randolph (eds) (1980) *A Corpus of English Conversation*. Lund: Gleerup.
- Sweetser, Eve (1990) From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure. Cambridge: Cambridge University Press.
- Tannen, Deborah (1984) *Conversational Style*. Norwood: Ablex.
- Tannen, Deborah (1986) *That's Not What I Meant!* New York: Morrow.
- Tannen, Deborah (1987a) Repetition in conversation: toward a poetics of talk. *Language*, 63: 574–605.
- Tannen, Deborah (1987b) Repetition in conversation as spontaneous formulaicity. *Text*, 7: 215–44.

- Tannen, Deborah (1989) Talking Voices: Repetition, Dialogue, and Imagery in Conversational Discourse. Cambridge: Cambridge University Press.
- Trier, J. (1931) Der deutsche Wortschatz im Sinnbezirk des Verstandes. Die Geschichte eines sprachlichen Feldes.
 I: Von den Anfängen bis zum Beginn des 13. Jh. Heidelberg: Winter.
- Trubetzkoy, Nikolaj S. (1939) *Grundzüge der Phonologie*. Prague: Cercle Linguistique de Prague.
- van Dijk, Teun A. (1972) *Some Aspects* of *Text Grammars*. The Hague: Mouton.
- Watzlawick, Paul, Beavin, Janet H., and Jackson, Don D. (1967) *Pragmatics of Human Communication*. New York: Norton.
- Weinreich, Uriel (1966) Explorations in semantic theory. In T. A. Sebeok (ed.), *Current Trends in Linguistics, Vol. 3.* The Hague: Mouton, 395–477.
- Whorf, Benjamin Lee (1956) Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf. New York: Wiley.
- Wilson, D. (1975) Presupposition and Non-truth-conditional Semantics. London: Academic.
- Zribi-Hertz, Anne (1989) Anaphor binding and narrative point of view. *Language*, 65: 695–727.