

ESSENTIAL INDETERMINACIES BETWEEN SEMANTICS AND PRAGMATICS

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Essential Indeterminacies between Semantics and Pragmatics

Explain what memes are.

Mostly the analogy is pretty shaky because of fidelity in reproduction but in the case of language there are two filters that make the analogy much stronger. One concerns phonological structures, the other syntactic structures.

There is much evidence that the human auditory systems are specifically designed to accomplish efficient mastery of the phonological structures of a language. Phonological structures are particulate and compositional and they determine what will be heard, in the given language, as the same linguistic pattern repeated again and what as a different pattern. They define the basic same-different scheme for a spoken language, hence what counts as correct reproduction of an element such as a word or a sentence. They help to ensure faithfulness in replication of linguistic representations, enabling the learner to know in advance what aspects of the speech signals produced by himself or others will be the instrumental aspects, the aspects that matter to meaning. Alvin Liberman has argued that phonological structure is the central feature permitting the practical possibility of language innovation (Liberman 1999). Much attention has been paid to the productivity made possible by a grammar that allows embeddings, so that an indefinite number of sentences can be generated with a limited vocabulary. But this kind of productivity would have minimum utility if free to operate only on a tiny vocabulary. The capacity of the language faculty as guardian of phonological structures, thus allowing rapid vocabulary growth not just in the child but also in the public language, makes possible a kind of productivity far more significant.

Universal grammar may be another mechanism helping to effect faithful reproduction of linguistic forms, in this case, syntactic forms. Like grasp of phonological structure, positing universal grammar is positing, at the very least, a filter controlling the aspects of the language a child hears that it will reproduce, or, in practice the same thing, determining what aspects will be perceived as functionally significant aspects. Prior agreement on the kind of materials that are to be used in communication and the aspects of these materials that are to be significant produces a genuinely new kind of faithful

replicator, ready for selection.

§. Besides having their own built in mechanisms for keeping replication faithful, language forms are subject to a new and characteristic kind of selection pressure, promoting the evolution of a genuinely different level of natural purpose or function.

The phonemic and syntactic structures of a language determine which aspects of it will be functionally significant, but do not, of course, determine what the functions—the meanings— of various language devices will be. The natural function of a language device is, of course, whatever that device has been doing, whatever effects it has had, that account for its continued reproduction. In the case of language forms, which effects will encourage reproduction is not determined merely by the desires or reinforcement mechanisms of the producer, the speaker. The functions of language forms concern the interests of hearers as well. Language devices will produce effects that interest speakers often enough to encourage continued replication only if hearers replicate hoped-for cooperative responses sufficiently often. And hearers will continue to replicate intended cooperative responses sufficiently often only if the results are also of interest to them. Language forms are selected for outcomes satisfactory at once to both partners in communication. Thus they have their own natural purposes, often coincident with, but derived separately from, the purposes of individual speakers and individual hearers who use them.

An example will help. Consider, for any language, what gets labeled as an “indicative syntactic form.” This form may have a number of alternative functions, just as one’s tongue has alternative functions, being designed, for example, to help both with mastication and with speech production. But the form will not be called “indicative” unless one central function is this. It effects production of a true belief, one having whatever propositional content the various other aspects of the sentence are designed to impart. This effect is often of interest both to speakers and to hearers. Production of false hearer beliefs may occasionally interest speakers, but rarely serves the interests of hearers. A hearer unable to interpret the indicative sentences he heard so as sometimes to extract genuine information from them would soon cease to form beliefs on their basis. He might first try out other interpretations of the form, and of other linguistic elements used with it, but eventually he would have to give up on it altogether. And if hearers ceased using indicative sentences as guides in forming beliefs, speakers would stop trying to use them to impart beliefs. Production of true beliefs, then, is a linguistic function of the

indicative form itself, whether or not a particular speaker and/or hearer have as their purpose to use it that way on a given occasion. Similarly, to instigate actions that accord with their propositional contents is a linguistic function of imperative mood sentences. If it were not sometimes in the interest of hearers to comply with directives—advice, instructions, directions, friendly requests, sanctioned directives, and so forth—imperative syntactic forms would either become obsolete or change functions.

The replicators that form the basis of a language in use, then, are not utterances only. Cooperative hearer responses are replicators as well. These replicated responses have the same coordinating functions as the utterances that prompt them. Better, the replicators forming the infrastructure of a natural language in use are two-part patterns, an utterance followed by a conventional cooperative hearer response. The whole pattern must be reproduced for the purpose of the language form itself, as opposed to the purposes merely of the current speaker and/or hearer, to be accomplished. A designated kind of perlocutionary act, as well as an illocutionary act, must be performed. Hearers as well as speakers perform conventional acts in using a language for its conventional functions (Millikan 1998).

For a new entrant into an established language community, learning to speak and to understand is acquisition of a purely practical skill. Others in the community are speaking and reacting to speech in habitual settled ways. How the novice must speak and react to achieve the normal fruits of language use merely needs to be learned. Once a specific language is in place, using its conventional forms in the conventional way is what evolutionary biologists call an “evolutionarily stable solution” (ESS) of the coordination problem of communication. No single participant can gain by unilaterally changing the basic rules by which he operates. A settled language community is not easily invaded by incompatible policies of language use. Still, the forms of a specific language are, of course, arbitrary within very broad limits. Languages are thus subject to slow copying drift, slow changes in phonological and syntactic structure as well as in word meaning. And there are also changes that come about through purposive innovation. Speakers and hearers may cooperate to improvise new uses—figures of speech, Gricean implicature, and so forth—and these uses may be copied and become conventional.

Where speakers and hearers cooperate to produce novel uses of language forms, the tokens that emerge have two clearly separable sources of function. (Cross-purposes lecture) First are the purposes that individual speakers have in using them. Second are the purposes of the forms themselves. If

these two sources of function conflict often enough, of course, the result will be either extinction of the form or change or addition of function. Change (or addition) will occur if the speaker's purpose is cooperative, the hearer understands the purpose, and this speaker-hearer sequence is reproduced, becoming conventional. Thus the use of Gricean implicature and of various figures of speech can direct the evolution of language in a way that is not merely drifting or random but driven by new speaker purposes that meet with hearer cooperation. Tension between the conventional functions of language forms and the cooperative purposes of individual speaker-hearer pairs that override these functions produces new conventional meanings. To examine these processes in more detail, however, I must first explain the notions of "language convention" and "conventional meaning" that I am using.

As I have been using this notion (see Millikan 1998) "conventions" are merely reproduced patterns of form or activity, where the pattern has a certain arbitrariness in relation to its function (if it has a function). That is, other patterns might have served that function as well: Proliferation of the pattern is due in part merely to precedent. Sometimes a conventional pattern involves one person and sometimes partners or a group of persons. Thus it is conventional to wear white for tennis and black for funerals and to say "Guarda la reina" when you put someone's queen in check. Exactly similarly, it is conventional to say "Please pass the butter" when you would like the butter passed and conventional for the butter then to be passed by the hearer. (The conventional perlocutionary act.) The fact that many conventions serve coordinating functions is accidental to their nature as conventions, although it is not accidental, of course, that certain kinds of coordination problems can be solved by the emergence or introduction of conventions.

Also accidental to conventions is the fact that following them is sometimes prescribed and sanctioned by social norms of one sort or another, ethical norm, rules of etiquette, laws and regulations, tournament rules, courtroom rules, and so forth. No one frowns if you name your cat "Rover," or if you bake square pies, though both are unconventional. Nor need conventions be patterns that are in fact followed by all members of some predesignated group. It is conventional for the bride to wear a blue garter, but there is no predesignated group in which this is always done. Sometimes English speakers say "Could you reach the butter?" or "I'd like the butter, please" rather than "Please pass the butter." These latter are all perfectly conventional ways to ask for the butter, illustrating that there are often various alternative conventions available to the same people for doing the same thing. What is conventional is not something mandated.

A pattern becomes conventional, in this sense, if it starts being copied from one person, pair or group to another rather than reinvented each time it appears, and if other equally practical patterns might have been used in its stead and would then have proliferated instead. Conventionality is thus viewed as, in part, a matter of the likelihood of persons doing or saying a thing in a certain way had they not observed its being done or said that way before. Thus conventionality may be a matter of degree, some people copying, say, the use of a certain easy metaphor from friends, while others arrive at it spontaneously.

Notice that this view of the conventions of language contrasts sharply with the view that a language is defined by a set of linguistic rules. Indeed, strictly speaking, on this view there is no such thing as "a language." There are only large raggedy collections of reproducing patterns, many or most of which are familiar to certain ill-defined raggedy groups of people, these conventions functioning pretty well together, mostly not getting in each other's way. And because language is just a raggedy collection of reproduced patterns having various origins and independent histories, it is inevitable that linguistic conventions should sometimes accidentally cross. Nothing prevents the same physical sign pattern's emerging from the employment of separate linguistic conventions. Because languages don't rest on prescriptive rules, fully dedicated forms are not possible de jure but only de facto. Glance at the section on equivocation in any informal logic text to find dozens of amusing examples of crossing conventions, the simplest cases involving homonyms. Usually this sort of crossing is harmless. The rest of the sentence or wider context immediately makes it clear from which family of tokens this token has been copied, hence which is its true linguistic function.

Language conventions, then, are just another variety of "memes," proliferated, usually, because they are serving a cooperative function, and carefully tailored to be replicated faithfully in certain respects. Certain parameters of the reproduction of these memes are constrained by the inborn mechanisms and/or conventions of phonological structure and grammar.

But other important aspects of their reproduction are left unfettered, including at least these three:

- (1) The length of the speech stream segment that is copied
- (2) The effects for the sake of which the segment is copied, thus what its function or meaning is
- (3) The degree of embedding in extra-linguistic context that may be

copied along with it

None of these parameters has a determinate setting for the proliferation of language forms. Consequently, there may be variation in how different persons process the same forms, indeed, in how the same person processes them on different occasions. Thus a clear distinction often cannot be drawn, even in principle, between an expression's having one sense or several senses, between its being used in a different literal sense or only in an extended or figurative sense, between what has been said and what merely conveyed — hence, more generally, between semantic and pragmatic phenomena. The attempt to construct intuitive tests or criteria by which these distinctions can always be drawn is, I believe, misguided. They depend at root on statistical regularities in psychological processing, and when different patterns of processing achieve very much the same practical results, there is no pressure for uniformity.

Consider first the length of the reproduced segment of the phonological stream. Just as there is no set length of chromosome that gets copied in sexual reproduction, there is no set length of linguistic expression to be copied. Sometimes a whole sentence form is copied. When answering the phone we say, "This is N" or "N speaking," not "I am N" or "Here is N," but when introducing ourselves in person we say "I am N" or "My name is N," not "This is N" or "N speaking." Other languages do it differently. There are countless conventions of this sort, people copying one another's phrases rather than conveying the same ideas in other equally possible ways. We speak of a flock of sheep or of geese, a herd of reindeer or of cows, a pack of wolves, a pride of lions, a crowd of people, and once it was a bevy of girls and a blush of boys. We say "next year" for the year after this one and "next week" for the week after this one but not "next day" for the day after this one. Instead, we say "tomorrow." Indeed "next day" would not be understood. We speak of the mouth of a river, the mouth of a bottle, the mouth of a balloon, the mouth of a cave, but not the mouth of a house or the mouth of a room, indeed, these last might not be understood at all in normal conversation. Using set phrases rather than composing one's own from smaller linguistic parts, rather, that is, than saying things in "unconventional" ways, is speaking "idiomatically." Beginning at 18 months, children learn about five to nine words a day, steadily, for the next eight years. Their capacity for learning conventional phrasings is probably equally dramatic.

People not only speak in chunks, they understand in chunks. Small children often learn phrases first, taking them apart only later. A close look at the

average essay written by a freshman who hasn't understood the material well reveals phrase after phrase that has been swallowed whole and returned still semantically, and sometimes even syntactically, unparsed. These phrases have not been memorized blindly, but understood in a fuzzy, holistic way. Some semblance of their intended meanings has penetrated, but lacking articulation, hence precision. I myself have only recently penetrated "going haywire," "casting aspersions," and "weighing anchor." The meaning of a whole easily separates from the compositional meaning that would be derived from its parts, and may then evolve independently, as in the slippage from "weighing anchor" to "Anchors Away," and from "God be with you" to "Goodby."

Consider, now, the case in which there has been no slippage in meaning so that although the phrase is copied as a chunk, the function performed, the meaning, is the same as the meaning that would be compositionally constructed from its parts. Take "This is N" said when answering the phone. It is conventional in the same way that eating meat with a fork is conventional. Eating with a fork is not made into an eating by the existence of a convention to eat that way. Similarly, given the prior conventions governing the individual components of the phrase "This is N," there is nothing arbitrary about what this phrase means. Meanings of such phrases are readily derivable from living principles governing their parts, even though in practice they may usually be grasped in chunks.

In such a case the meaning is simultaneously derived from two sources, (1) derived compositionally and (2) it results directly from its holistic reproduction to serve that same function. Understanding this makes it easier to grasp what is happening in cases where these two sources of meaning come apart, holistic meaning eventually floating free of compositional meaning. Where a chunk's meaning has not pulled free from its moorings, some people may hear it as built out of its parts while others hear it holistically. Indeed, whether a given person hears through to its parts may be a matter of degree, or may vary from occasion to occasion. Do these different ways of understanding this string of phonemes constitute it as a strange sort of homonym having two meanings but which somehow converge?

We can get clearer on the matter this way. Linguistic functions or meanings, as distinct from the intentions of individual speakers, are natural purposes that attach to expression lineages. They are functions that account for the continued propagation of these lineages. Homonyms are sound-alikes that come from different lineages. They may have a distant common origin, but they have been copied from different branches of the family tree. "Table" as

in “table of contents” and “table” as in “dinner table” have a distant common origin, but current tokens having one of these senses are never copied from tokens having the other. Like different species, different senses of a word or expression type, listed in dictionaries, for example, as senses “1,” “2,” “3,” and so forth, are distinguished by lineage. But where a phrase is sometimes understood holistically and sometimes compositionally, so long as these different ways of processing yield the same result, its lineage will remain unbroken and it will have only one sense in the public language.

Similarly, when words or longer expressions are used in extended ways devised by the individual speaker, say, in homemade metaphors, euphemisms or other homemade figures of speech, what makes the usage into an extended rather than a “literal” one is that the expression token was copied from a lineage normally proliferated to serve a different (its “literal”) function. Complications enter when a particular extended usage begins to be copied from speaker to speaker, becoming a familiar idiom. It is well known, of course, that in time such an expression may acquire the new use as a new literal sense. But what is happening during the period of transition? What is happening, for example, when a metaphor is dying but is not yet dead? How, exactly, does speciation occur in the case of simple language forms?

What happens is, in part, similar to what happens when phrases are understood holistically. Different people, whether as speakers or hearers, may hear the expression differently, indeed, the same person may hear it differently on different occasions. Sometimes it carries strong echos from its original usage, sometimes less strong, and sometimes none. Tokens that are either produced or understood with echos are actually hybrids, produced by the crossing of two gradually separating lineages of production and understanding. Tokens that echo for speakers are reproduced by these speakers on two models, copied due to familiarity with the new use but also, in part, due to familiarity with the old. Likewise, tokens that echo for hearers are understood on two models at once. Thus expression tokens at this intermediate stage have two properly linguistic or semantic meanings at once. They continue to owe some of their proliferation to, hence to derive some of their natural purpose from, the function their original lineage still serves, but they also belong to a new lineage with a new function.

Exactly the same analysis applies to half dead conversational implicatures. Tokens of the infamous expression “Can you pass the salt?” no longer function merely as conversational implicatures. They also have a literal imperative meaning. They belong to two lineages at once, a wide-rang-

ing syntactic family of English expressions that proliferates owing to its interrogative function, and a restricted family that is an idiomatic form used for requests. These tokens are both literal questions and a literal requests, nor does this prohibit echoing their origin as conversational implicatures.

In sum, it is not always necessary to make a choice between this being the literal meaning and that being the literal meaning. Occam’s razor employed to prohibit proliferation of semantic meanings can be as useless as it is for prohibiting the proliferation of living species. On the other hand, complete separations may eventually occur between lineages that had earlier reproduced tokens jointly. The classic case is “The dog went to the bathroom on the living room rug” (Morgan 1978). There is no longer any interbreeding between the families from which tokens of “went to the bathroom” derive.

Now consider the question, for the sake of reproducing what aspect of its effects is a linguistic segment replicated? That is the same as asking what it’s linguistic function, its meaning, is. There is nothing to prevent different people from noticing somewhat different effects of a language form, or noticing different effects at different times, or from generalizing to new cases in somewhat different ways. How broad or narrow, abstract or concrete, a category is, how many distinct senses a word has, where literal meanings leave off and extensions begin, are also intrinsically vague affairs.

Consider red hair. If a dress were that color, it would never be called “red.” Our cat that everyone calls “orange” exactly matches our simulated wood kitchen floor that everyone calls “brown”. Do “red” and “orange” each have several senses which are disambiguated according to context? Or are “red hair” and “orange cat” understood as chunks (like “mouth of a river”)? Or does “red x” mean red for an x, as “large mouse” means large for a mouse? (Wheeler 1972)? Does “long” mean the same thing or different things when applied to space and to time, that is, to the first, second, third, and then the fourth dimension? Does “clear” come in different semantic senses when I clear the table, clear the ground, and when the water is clear or the coast is clear? Is the term “lineage” used literally when applied to chains of copied words or is this an extended use? If you say you have “gone around” a squirrel because you have gone from north to east to south to west to north of a tree trunk it is on, even though it too keeps moving around the tree so that you never get behind it, are you extending the meaning of “going around,” or does “going around” have two meanings? (William James.)

Nothing determinate settles questions of this sort, not even within single idiolects. Neither exactly what has been copied from what, nor why it was

copied, hence where the copying chains have begun to meander in “new” directions, is anywhere written. Similar remarks go for the traditional question whether such words as “some” and “two” have more than one semantic meaning (at least some, at least two and only some, only two) or whether the shift from one of these meanings to the other is pragmatic. There is no reason to suppose that the various lineages concerned here are clearly formed into separate species, indeed every reason to suppose they are not. Occam’s razor, unfortunately, cannot prevent the actual multiplication of complexities.

Last, consider whether what is copied is expressions or expressions-in-contexts. In the case of language contexts, this question sometimes merges with questions about chunking. Compare “Have you had lunch?” with “Have you had chickenpox?” There is a shift here from meaning “Have you had ... today?” to meaning “Have you had ... ever?” Does this shift take place in the semantics, or is it merely a pragmatic phenomenon? Are there two different semantic meanings of “Have you ... ?” which are disambiguated in context? Or does “Have you ...?” mean the same in both cases, referring vaguely to some past time or other, the more exact time meant being pragmatically calculated from context? And there is also a chunking possibility. Perhaps what is copied is the use of “Have you...?” coupled with reference to an event of a sort that happens only once or a few times in a person’s life, and another use of “Have you...?” coupled with reference to an event of a sort that occurs periodically. In that case it is not the meaning of “Have you...?” that changes. Rather, the meaning is holistic, not strictly built up out of parts.

Similarly, if John and Bill went to Boston then John went to Boston, so if Whitehead and Russell wrote Principia why doesn’t it follow that Whitehead wrote Principia (Harnish 1976)? Does “A and B” have two meanings, A and B together versus A and B separately, or does it have one vague meaning requiring further pragmatic specification? The chunking possibility is that subject-plus-verb-ascribing-responsibility is copied whole always to mean the subject has sole responsibility. Then the difference between “John and Bill went to Boston” and “Whitehead and Russell wrote Principia” would have nothing to do with the meaning of “and.” Blind faith in compositional semantics may be rather like belief in “beanbag genetics.” Just as the context of other genes in which a particular gene finds itself may radically change its phenotypic expression, similarly, the context of other words in which a particular word finds itself may change the contribution it makes to the semantics of the whole.

There is no reason to suppose that one rather than another of these

suggested three ways of copying or understanding how “Have you...” works, or how “X and Y did Z” works, is imposed on speakers of English as such, nor even that it is determinate for individual speakers exactly which aspects of usage they themselves copy. Will it matter to the hearer exactly which aspects of language use are copied? Will it matter which parts are conventional hence semantic and which merely pragmatic? If “Have you...?” has two semantic meanings, then the hearer must use context to determine which of the two is being employed. If “Have you...?” is univocal but indefinite, the hearer must use context to determine, not the semantic meaning, but the speaker’s meaning. If “Have you...?” is copied in a chunk along with reference to a periodically recurring event, this chunk having a holistic semantic meaning, understanding still won’t be merely decoding, for the hearer will have to determine whether the speaker is interpreting the event as recurring or not. Does “Have you been in Paris?” ask whether you have just been in Paris or whether you have ever been in Paris? How about “Have you eaten snails?” (Suppose the last is asked by a physician examining your hives.) Imagine English-speaking Martians whose nutrition at home comes only in liquid form but some of whom occasionally visit earth. One asks another, “Have you had lunch?”, curious about what that strange experience is like.

Where different ways of generalizing are possible, usually it makes no difference at all to the hearer which one is governing the speaker’s use. [But there can also be contexts in which these differences make a difference. Speakers sometimes purposefully mislead or make jokes by producing tokens that would have one meaning if derived one way but another if derived another.]

Not just position in linguistic context [reference to a recurring event], but position in world context or in conversational or mutual knowledge context, is sometimes copied by speakers. Saying “hit me” specifically in the context of playing blackjack to ask the dealer for another card is copied whole. Saying “break a leg” specifically to an actor to wish luck in a performance. These phrases-in-context are reproduced items, replicators, each having as-a-whole-including-context a special linguistic meaning. Contrast the case of “This is N” used to introduce oneself on the phone. Its use in a particular context is copied, but saying “This is N” on the phone does not have an independent meaning. It does not mean what it means because it is said on the phone.

[We must be careful here, however. The fact that the whole configuration, “Hit me”-said-while-playing-blackjack, has a special linguistic meaning does not entail that every instance of someone saying “Hit me” while

playing blackjack is automatically a replication of this pattern, hence automatically means (literally, semantically) deal me another card. That a certain lineage composed of tokens of a certain sound in a certain context has a certain semantic function does not entail that all tokens of that sound type in that context type are members of that lineage. It does not entail that that configuration of sound and context is somehow dedicated to that function. Indeed, in very principle there can be no strictly dedicated forms in a language—it follows that there can be no mere “decoding” of language. True, circles can be drawn around groups of people who then become subject to certain laws, rules, or regulations, including, perhaps, that they are required to use certain designated forms only for certain purposes. A state law may require that Roberts Rules of Order be followed in certain meetings, including, for example, that in these meetings one must not raise one’s hand during a hand vote in order to request to speak. In that circumstance, hand-raising is to be a dedicated gesture constituting a vote and it will always count as such. It counts as such de jure. But there are no such circumscribed groups or prescriptions associated with a natural language. No idiom is dedicated de jure, but only, perhaps, de facto, and then only within a certain tradition. Other traditions may always cross over and intercede. Wider context may always suddenly be needed for interpretation.]

Demonstratives and indexicals are the most obvious examples of language forms with meanings that depend on context. They also illustrate well how the conventional shades into the pragmatic. Relations of demonstratives to items to which they refer in the immediate external environment, or in the discourse environment, or in the environment of mutual knowledge, may either be copied or improvised. Use of a pointing gesture along with a demonstrative may typically be copied, hence may have a straightforward semantic meaning. But much evidence shows that the use and comprehension of pointing just by itself to focus joint attention is natural for humans. This meaning is not conventional. On the other hand, much pointing has also become stereotyped or “conventionalized,” the particular culture requiring use, say, of the first or the middle finger, or the head, or the lips.

Apart from pointing, there are many other ways to establish joint attention, making salient or using the natural salience, of objects in the external or discourse environment as one refers with demonstratives. Some of these ways are improvised, perhaps, and others copied, one person improvising where another one copies. What is at first merely natural may acquire a semantic function as it is first imitated and perhaps later stereotyped or “conventionalized.” Surely this must happen in degrees. To what degree a certain

method of demonstrative reference is part of the language and to what degree it is improvised from natural materials hence merely pragmatic will be a matter of statistics on individual psychological processing, not open to a priori inspection or argument.

The domains of quantifiers are understood only in context [—in the external environment, or in the discourse environment, or in the environment of mutual knowledge. Quantifiers refer to whatever domain is currently the object of joint attention, either naturally so, or because the speaker has done or said something to make it so.] Possessive forms work similarly. [They can refer to any salient relation uniquely pairing possessors with possessed, such as ownership, physical possession, current responsibility for, current use of, an individuating kinship relation, the relation of having been made by or acted on by, and so forth. Thus “John’s book” may be the one he owns or carries, the one he wrote or bought or brought, and so forth. Again, context produces the joint attention necessary for communication. In order to be understood in such cases—and there are dozens like them—the speaker must either recognize or establish joint attention.

Yet the hearer is equally responsible in communication and, indeed, the capacity to recognize exactly where another’s attention is directed is extremely keen, even in very young children. The speaker herself, along with her own natural dispositions to attention and the natural symptoms she shows of attention, are a major part of the context.] But what parts of a speaker’s repertoire of methods for establishing joint attention are natural, what parts improvised from natural materials, what parts imitated, and what parts have become stereotyped and conventionalized, cannot be a determinate matter. Nor can it be determinate exactly how large the copied chunks are, hence exactly what chunks have semantic meaning. Once again, it cannot be determinate where the semantics ends and pragmatics begins. The distinction between the functions or purposes of language forms themselves and the intentions or purposes merely of individual users is again blurred. When misunderstandings occur, often there is nothing to determine whether the speaker has said or conventionally indicated something wrong, or merely meant something his hearer failed to interpret.

