

## **Philosophical Problems in Child Language Research**

### **The Naive Realism of Traditional Semantics**

John Lyons, Oxford linguist, writes in his book (1995) on linguistic semantics:

“in my view, it is impossible to evaluate even the most down-to-earth and apparently unphilosophical works in descriptive semantics unless one has some notion of the general philosophical framework within which they are written. This holds true regardless of whether the authors themselves are aware of the philosophical origins or implications of their working principles” (p. 88).

One can only agree with Lyons’ position. And one can only admire his honesty when, later, he acknowledges:

“throughout this book I have adopted the viewpoint of naive realism, according to which the ontological structure of the world is objectively independent both of perception and cognition and also of language. As we have dealt with particular topics, this view has been gradually elaborated (and to some degree modified); and a more technical metalanguage has been developed in order to formulate with greater precision than is possible in the everyday metalanguage the relations of reference and denotation that hold between language and the world.

According to the viewpoint adopted here, the world contains a number of first-order entities (with first-order properties) which fall into certain ontological categories (or natural kinds); it also contains aggregates of stuff or matter (with first-order properties), portions of which can be individuated, quantified, enumerated—and thus treated linguistically as entities—by using the lexical and grammatical resources of particular natural languages. All natural languages, it may be assumed, provide their users with the means of referring to first-order entities and expressing propositions which describe them in terms of their (first-order) properties, actual or ascribed, essential or contingent: such languages have the expressive power of first-order formal languages” (p. 325).

This is a very clear explanation of the philosophical position known as “naive realism.” And Lyons is surely correct in seeing naive realism as the default position in traditional semantics. It is assumed that there is an objective world out there, and that it is the job of words to describe (and refer to) the objects in that world, to represent them and their properties. Reality is independent of language; words cannot change the world.

Why this particular philosophical position? It would seem to be a consequence of the project of *formalizing* language.

## The Costs of Formalism

Bill Hanks (1996) points out that formalist approaches to language rest on a fundamental division between language and the world. A number of classical distinctions follow:

<u>language</u>	<u>world</u>
langue	parole
sense	reference
competence	performance
intension	extension
denotation	designation
sentence	utterance
propositions	objects
grammar	speech

In each case, the member of the pair that is “worldly” is granted lower status, and is assumed to be secondary, dependent, or derivative.

Overall, the formalist strategy assumes that language can be studied by removing it from context; indeed, that this *must* be done if the true essence of language is to be appreciated:

“[F]ormalisms based on the irreducible system of language always posit a boundary between relations inside the system and relations between the system and the world outside it. The former include things like the syntax or phonology of a language, and the latter things like the psychology or sociology of talk. Knowledge of a language, under this view, is inherently distinct from knowledge of the world. It is the idea of a boundary between language and nonlanguage that makes all these other divisions possible. The system is at once more abstract, more general, and inherently longer lasting than any of the activities in which it is put to use. Proceeding from the break with particularity, formalist understanding leads to general laws of language and models of the combinatory potential of linguistic systems. This potential logically precedes any actual manifestation of speech” (p. 7)

Hanks notes that even speech act theory and Gricean implicature still assume that “utterances correspond to sentences and sentences encode full propositional meaning.” In these approaches to pragmatics, it is still believed that “propositional content, literal meaning, is analytically separable from the penumbra of situational factors engaged in use. This is, as it were, the last stand of irreducibility, for it amounts to the claim that grammar is a prerequisite of speech. Still, it goes beyond pure grammar in trying to classify and describe a much wider range of phenomena” (94).

What Hanks means by the “irreducibility thesis” the view that language’s “structure and evolution cannot be explained by appeals to nonlinguistic behavior, to emotion, desire, psychology, rationality, strategy, social structure, or indeed any other phenomenon outside the linguistic fact itself” (p. 6). This contrasts with the “relationality thesis” held by “a family of approaches that have in common a focus on the cross-linkages between language and context and a commitment to encompass language within them... It foregrounds the actual forms of talk under historically specific circumstances: not what could be said under all imaginable conditions but what *is* said under given ones.... Language appears as a historical nexus of human relationships, a sudden patchwork that defies our ability to generalize. The line between knowing a language and knowing the world comes into question” (p. 7-8).

## Unbridgeable Gaps

This dualism that traditional (formalist) linguistics requires leaves a number of “gaps” that theory and research then tries to fill—unsuccessfully, of course. Lakoff and Johnson (1999) identify three of these gaps. It is the final one that primarily concerns us here:

Gap 1: “The gap between the natural language and the symbols in a ‘formal language’ that are used to represent aspects of the natural language.”

Gap 2: “The gap between the symbols of the formal language and the sets of arbitrary abstract entities in the set-theoretical model of the language.”

Gap 3: “The gap between the set-theoretical models of the world and the world itself” (p. 100)

“The first gap, the gap between natural languages and formal symbol systems, was supposed to be filled by formal linguistics. That promise has not been kept, and it appears that it cannot be. The first full-blown attempt was Lakoff and McCawley’s generative semantics, which sought to combine formal logic and generative linguistics....

Formal model theory cannot fill the second gap for an empirical reason as well [as the formal problem of indeterminacy of reference]: The meanings of words and grammatical constructions in real natural languages cannot be given in terms of set-theoretical models (see Lakoff, 1987).... Set-theoretical models simply do not have the kind of structure needed to fit visual scenes or motor schemas, since all they have in them are abstract entities, sets of those entities, and sets of those sets. These models have no structure appropriate to embodied meaning—no motor schemas, no visual or imagistic mechanisms, and no metaphor.

The third gap, which may be the most difficult of all to bridge, has barely even been discussed. That is the gap between the set-theoretical models and the real world. Most formal philosophers don’t see the problem,

because they have adopted a metaphysics that appears to make the problem go away. That metaphysics goes like this: The world is made up of distinct objects having determinate properties and standing in definite relations at any given time. These entities form categories called natural kinds, which are defined by necessary and sufficient conditions.

If you assume this objectivist metaphysics, then it follows that certain set-theoretical models should be able to map onto the world: abstract entities onto real-world individuals, sets onto properties, sets of n-tuples onto relations, and so on. But such a mapping must bridge the gap between the model and the world. No progress whatever has been made in demonstrating that the world is the way objectivist metaphysics claims it is. Nor has anyone ever tried to fit such a set-theoretical model to the world. The problem is rarely discussed in any real detail" (p. 100-101).

## Confusions about Meaning

The philosophical assumptions of formalist linguistics and its resulting gaps seem to be the origin in child language research of remarkably confused and confusing statements about the relations of word, world, and mind. I've been collecting examples; here are just a few.

Consider the following example, from esteemed Lois Bloom, who has been studying children's language for thirty years, in her overview of the field in the latest edition of the prestigious *Handbook of Child Psychology (5th ed)*.

"When a child looks at the clock on the wall and says 'tick-tock,' the act of reference has a mental meaning that gives rise to the behavior we observe. The mental meaning represents and refers to the object in the world; the word the child says names the representation in the mental meaning" (Bloom, 1998, p. 317).

I find this almost impossible to parse, it is so muddled. In what sense does the act "have" a meaning? What is that "meaning"? How is that meaning "mental"? How does it "give rise" to the behavior? Doesn't the act refer, rather than the meaning? If the latter refers, how? What does it mean to say there is a representation "in" the mental meaning? What kind of "representation"? Isn't the "mental meaning" already a representation? How does the word "name" this representation? Doesn't it name the object? Can the "mental meaning" both "represent" the object and have a "representation" "in" itself?

What is going on here? A good deal of confusion about the relationship of mind and world coexists with a taken-for-granted dualism, the result of which is a problematic status for language. Is language in the mind, or in the world? It comes out of our heads, doesn't it? But it comes out into the world! Is language mental, then, or material? Do the words we say represent our thoughts, or do

they represent objects in the world? Or do they represent our representations of objects in the world? Whoa!

Here's another example:

“Consider for a moment the nature of the mental leap involved in using two-word utterances. If a baby can say something as deceptively simple as “sit lap,” it means that she has created an image in her mind of a state of affairs she would like to create. She is thinking of the future, and not just in the present” (Golinkoff & Hirsh-Pasek, 1999, p. 153-154).

Created an image, create a state of affairs? A lot of creation is going on here. The child is thinking “of” the future, but “in” the present? Is this an important distinction or not? And how would this account be different if she just said “lap”? Why is a two-word utterance such a big leap compared with a one-word utterance? And what makes this leap “mental”?

We can see at least two taken-for-granted assumptions in examples such as these. The first is that meaning is mental; the second that language is a conduit.

### *Meaning is Mental*

One of the central assumptions at work here in these confused statements is that “meaning” (whatever it is!) is in the mind. Bloom writes frequently of language “expressing” thought. Berko Gleason (1997) writes similarly of “meaning” being a “mental event.” But if it is in the mind it becomes very difficult to say how it relates to objects and events in the world.

### *The Conduit Model of Language*

If meaning is in the individual mind, then it follows that language is a way to transfer meaning from one mind to another, and we find exactly these kinds of statement.

“Talk has evolved as a highly efficient and versatile means of conveying information and attitudes from one mind to another” (Garvey, 1984, p. 59).

This is what Reddy calls the “conduit theory” of language: that language provides a channel through something—meaning; information—is conveyed from speaker to hearer.

## **Leaving Language in the Wild**

If the project of decontextualizing language and drawing a clear divide between language and the world leads to such problems and confusions, perhaps it's not such a good idea after all. Can we find a way to study language that keeps it in context? What would be the consequence of this for research on child language?

For assistance in answering these questions I will be drawing from William Hanks' book *Language and Communicative Practice*. Hanks is a linguist trained at the University of Chicago, and in this book he surveys many of the ways language has been studied. Your assigned reading will cover "Three-plus-two" phenomenologists (Ingarden, Schutz, Merleau-Ponty, Voloshinov & Rommetveit).

We'll talk more about this in the next class, but just to keep your hopes high here's an example Hanks mentions without going into a lot of detail.

### *The Prague School*

The Prague School of functional linguists formed in 1926, with the aim of studying language not just in formal terms but also in its social and historical aspects. These linguists believed that linguistic form is shaped not by an abstract grammatical competence but by the demands of speaking.

Rather than separating diachronic aspects of language (its historical change) from its synchronic aspects (the structure of the present system) and focusing on the latter, as de Saussure had, they proposed a "dynamic synchrony" that saw "innovation, retention, and variation" (Hanks, p. 102) as central. "The linguistic present would not be defined by a monolithic system in equilibrium but instead by a constant tension among, pasts, presents, and futures, played out on the stage of a diverse social landscape" (p. 102).

Recently, since the 1989 reforms, there have been efforts in the Czech republic to revive the Circle. [See <http://www.bohemica.com/plk/plchome.htm> --The Prague Linguistic Circle Home Page]

The Prague School linguists shared the view that:

- "1. Grammatical form is oriented towards, and costructured with, utterance context.
2. Utterances, and by extension sentences, are multifunctional, and their organization is determined by the relative salience or hierarchy of functions.
3. The encoding of information in lexical items is asymmetric such that paradigmatic oppositions (cf. Saussure) commonly consist in one member whose term is more specific than the other; this insight became the basis for marking theory. [see <http://elex.amu.edu.pl/~sobkow/marked.htm>]
4. No human language is a single system, nor can it be described properly as if it were; a language is a system of systems, and its relation to the social world is defined by functional differentiation, not functional homogeneity" (Hanks, p. 93)

The Prague linguists argued that formalism privileges just one function of language: its referential function. They also drew a distinction between everyday

speech (context bound, elliptical, and repetitious), task-oriented speech (more definite, less dependent on idiosyncratic features of its context) and intellectual speech (minimal context-dependence, maximal transparency, a specialized code, opaque to outsiders).

And they distinguished between automated speech (routine, habitual, matched to its setting) and foregrounded speech (unexpected, uncommon). The difference between these two is always a matter of degree, and it is judged against a horizon.

## Phenomenologies of Language

The assigned reading for our next class includes two chapters from Hanks' book: chap. 6, "Three Phenomenologies of Language," and chap. 7, his analysis of a sample of routine conversation among Maya speakers.

At the end of the chapter preceding one I am asking you to read, Hanks paints a portrait of approaches to language that increasingly strive to keep language in its social and historical context. Speech act theory and conversational implicature both extended the study of language into the ways talk is used to accomplish things in the real world, even if they continued to seek formal descriptions of these phenomena. The Prague School took a step further towards acknowledging the way context defines talk, rejecting the idea that language forms a single unified system. So-called "situation-semantics" abandoned the notion of a literal meaning that precedes context and is independent of it, and thus can be specified formally. And phenomenological approaches discard the boundary between language and world:

"Austin's framework led to a progressive expansion of the scope of grammar, as speech acts were assimilated to the conventional meanings of form. Grice's implicatures provided a way of simplifying the semantics by linking it to logic and treating conversational inferences as the pragmatic side effects of using forms with literal meanings in context. The Prague School theorists in turn introduced the concepts of functional differentiation and the differential focus of utterances as aspects of speech setting. Their approach linked linguistic meaning still more closely to utterance context. Finally, contextualized approaches to semantics take the next logical step of arguing that literal meaning itself is derived from the intersection of linguistic form with context. In the next chapter we explore three phenomenological frameworks for describing language. Among the features they share is a fundamental rejection of the separation between language the system and the field of human activities" (p. 115)

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