

HISTORY AND PHILOSOPHY OF LINGUISTICS – AN INTERVIEW WITH FREDERICK J. NEWMAYER

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REVEL – Who were the first linguists in North America and how did they help to develop the field?

NEWMAYER – The origins of linguistics in North America are quite different from its origins in Europe. In Europe, for the most part, linguistics is rooted in the philological tradition. Given the long history of the study of Greek and Latin, it was very natural to go from there to comparative Indo-European linguistics and from there to developing principles of language change. Synchronic linguistics was a later development. But in North America, scholars were confronted with hundreds of languages that had no written records at all. So languages had to be described synchronically from the very beginning. The first grammars were written by missionaries, of course, but even in the 19th century there were scholarly descriptions of indigenous languages, primarily by those interested in ‘Indian’ culture and traditions. But the real founder of linguistics in North America was Franz Boas (see especially Boas 1911/1963). Even today, Boas is worth reading. Some of the clearest statements on how all languages are equal grammatically, that is, that there is no such thing as a ‘primitive language’, are found in his writings. And Boas trained many linguists who would go on to give North American linguistics its distinctive stamp. Edward Sapir, for example, one of the leading linguists of the early 20th century, was Boas’s student. The fact that most North American languages have structures that are radically different from those of European languages encouraged the detailed

descriptions of grammatical forms, so many of which had never been encountered before by scholars. So North American linguistics was grounded in the data in a way that European linguistics was not. There was a down side to a focus on novel data too, unfortunately. Many North Americans from the 1920s to the 1960s were very anti-theoretical. Their idea was that the next language that one looked at might be totally different from all of the preceding ones, so it would be dangerous to draw conclusions about universals. Hence the extreme empiricism of so many American linguists at that time (though Sapir himself was never hesitant to theorize).

Another important figure in American linguistics was Leonard Bloomfield, who worked between the 1920s and the 1940s. Bloomfield more than anybody else campaigned for a *distinct field* of linguistics, both academically and intellectually. As a result of his efforts to demonstrate that linguistics is not a subfield of language studies, anthropology, psychology, or whatever, it has always been easier to establish autonomous departments of linguistics in North America than elsewhere in the world.

REVEL – In your book *Language Form and Language Function* (MIT Press, 1998), you quote an interesting remark by Elizabeth Bates: ‘Functionalism is like Protestantism: it is a group of warring sects which agree only on the rejection of the authority of the Pope’ (p. 13). What do you think of that now, over a decade since the publication of your book, and almost over two decades since her quote¹?

NEWMAYER – Not much has changed, really. There is far more diversity within functional linguistics than within formal linguistics. One extreme wing of functionalism even denies the reality of linguistic structure — for example, see Hopper 1988 and Thompson 2002. But at the other pole there are functionalist approaches that not only posit formal structure, but endeavor to formalize it precisely, as is the case for example with Functional Discourse Grammar (Hengeveld 1989) and Role-and-Reference Grammar (Van Valin and LaPolla 1997). Formal

¹ This quote was cited in Van Valin (1990: 171): Van Valin, Robert D. 1990. Functionalism, anaphora and syntax. Review of *Functional Syntax*, by S. Kuno. *Studies in Language* 14.

linguistics is not so divided. Even very different formal models, such as the Minimalist Program (Chomsky 1995) and HPSG (Sag, Wasow, and Bender 2003), share more essentials than do the various approaches to functional linguistics. So they might all agree that Chomsky is fundamentally wrong, but that in and of itself does not lead automatically to a unified research program.

There is also the question about what it means to give a ‘functional explanation’ of a phenomenon. There is little agreement here among functionalists. For many functionalists, explanation has to be ‘external’, that is, rooted in pressures from discourse, non-linguistic cognition, or other outside influences. Typologically-oriented functionalists generally take such a position (see Comrie 1989 and Croft 2003). On the other hand, Cognitive Linguistics (Lakoff 1987; Langacker 1988) is typically considered to be a species of functional linguistics, but most papers in that approach provide no serious external explanations at all. All that they do is to argue (sometimes successfully, sometimes not) that the form-meaning linkage is much closer than most generativists believe. That is not an ‘external explanation’.

REVEL – Some theories, such as Optimality Theory – or SPOT, *Strong Parallel Optimality Theory*, as used by Teeple (2008)², try to conciliate formal and functional description and explanation. How do you see this approximation?

NEWMAYER – I have argued in my book *Possible and Probable Languages* (Newmeyer 2005) that Optimality Theory does not provide the best way to reconcile formal and functional linguistics. The basic idea of this approach is that each constraint is paired with a functional motivation. But that is not very helpful in understanding the nature of grammatical structure, since we can find *some* functional motivation for *any* grammatical process. But even worse, functionally-based Optimality Theory is incapable of answering the fundamental question of typological-functional linguistics: Why are some grammatical features more common in the world’s languages than other features? Recall that the constraints of OT are

² Teeple, David. 2008. Prosody Can Outrank Syntax. *Proceedings of the 26th West Coast Conference on Formal Linguistics*.

universal — it is only their ranking that is language-particular. So one constraint ranking provides the very common ordering SVO and another constraint ranking provides the very rare ordering OSV. Optimality Theory has no mechanism for explaining why the former ranking is common and the latter ranking is rare. I also feel that it is a fundamental error to pair constraints and functional motivations. Grammars are too complex to allow such an atomistic approach. A grammar *as a whole* is, in part, a response to functional pressure. It makes no sense to me to argue that the individual subparts of grammars (constraints, rules, constructions, etc.) are functionally-motivated.

The Teeple paper is very interesting, but I do not think that one needs Optimality Theory to express the relevant generalizations. What we have here is really just a matter of grammatical architecture — modular versus parallel. We have non-OT models that are capable of expressing such generalizations without recourse to the complex OT tableaux. Even the versions of the Minimalist Program that posit Multiple Spell-Out allow the generalizations in the Teeple paper to be expressed, given that syntax and phonology interact at more than one level.

It is important to point out that very few linguists are now doing OT syntax. OT phonology has a certain logic to it, which OT syntax lacks. The key notions of OT, namely, ‘markedness’ and ‘faithfulness’, go back many decades in phonological research. But what do these constructs have to do with syntax? What is marked or unmarked in syntax? And faithfulness to what? Syntactic deep structures? Logical form? Conceptual meaning? Discourse? Nobody has the slightest idea. I am not enough of a phonologist to predict the future of OT phonology, but I would be surprised to see a lot more work being done in OT syntax.

REVEL – How to conciliate Formal and Functional Linguistics these days?

NEUMEYER – My position on that question is essentially the same as it was in my book *Language Form and Language Function* (Newmeyer 1998). I argued there that the evidence is overwhelming that grammar (and syntax within grammar) form

autonomous systems. By that I mean that the principles of combination obey their own algebra and do not refer to elements outside of that algebra. But that conclusion does not preclude the possibility that grammars are functionally motivated. In fact, functional pressures are constantly shaping and reshaping grammars. Most functionalists do not believe that formalism and functionalism are compatible, of course. A typical quote is the following one from Bates and MacWhinney: “The autonomy of syntax cuts off [sentence structure] from the pressures of communicative function. In the [formalist] vision, language is pure and autonomous, unconstrained and unshaped by purpose or function” (Bates and MacWhinney 1989: 5). But Bates and MacWhinney and others who share such a view are mistaken. The autonomy of syntax and external functional explanation are fully compatible. Let me illustrate with an observation that you could practically call a point of logic. Quotes like that from Bates and MacWhinney seem to take it for granted that once one characterizes a system as autonomous, a functionalist explanation of that system (or its properties) is impossible. But that is not true and it seems to be only *linguists* who have this curious idea. In other domains, formal and functional accounts are taken as complementary, not contradictory. To illustrate, let’s look at a formal system par excellence — the game of chess. Chess is an autonomous system: There exists finite number of discrete statements and rules. Given the layout of board, the pieces and the moves, one can ‘generate’ all of the possible games of chess. But functional considerations went into the design of system, namely to make it a satisfying pastime. And external factors can change the system. However unlikely, a decree from the International Chess Authority could revise the rules. Furthermore, in any game of chess, the moves are subject to conscious will of the players, just as any act of speaking is subject to the conscious decision of speaker. So chess is both autonomous and explained functionally.

If you want something more concrete, I feel that the approach of John Hawkins is the most promising for reconciling formal and functional linguistics (see Hawkins 1994; 2004). Hawkins assumes a formal generative grammar, though he is agnostic as to the particular framework. He shows how parsing principles explain the typological distribution of grammatical properties. For example, consider the well-known correlations VO and prepositional, OV and postpositional. Hawkins shows that processing is more difficult when a VO language is postpositional and if an OV

language is prepositional. Such languages exist (Finnish and Amharic respectively), but they are much rarer than the languages that are more processing-friendly. The performance pressures hence play out typologically.

We can see how processing pressures work by looking at language use. When grammars permit two alternative means for expressing the same content, it is generally the more easily parsed that is chosen by speakers. So English allows sentential subjects both *in situ* and extraposed:

- (1) a. [That Mary will win] is likely.
- b. It is likely [that Mary will win].

Sentences like (1b) are vastly more likely to be uttered than sentences like (1a). English still allows both possibilities, but other languages ban *in situ* sentential subjects outright. Notice that there is nothing here that challenges the basic idea of formal linguistics. Children learning English are less and less likely to hear sentences like (1a), which quite possibly at some point will lead them not to consider such sentences as grammatically possible. But they still acquire a formal autonomous grammar.

REVEL – Could you please suggest some essential readings on History and Philosophy of Linguistics, for our readers?

NEWMAYER – This is a hard question. As far as the history of linguistics is concerned, most books devote the great majority of their pages to pre-modern approaches: the Greeks and Romans, the Middle Ages, and so on. That's fine if your interests lie in those directions, but not very helpful if you want to understand the roots of current theorizing. There is one history of syntax that I highly recommend: Giorgio Graffi's *Two Hundred Years Of Syntax: A Critical Survey* (Graffi 2001). He really gives one a feel for how the field has evolved and why we think as we do. As far as phonology is concerned, I think that the best work is still Steve Anderson's *Phonology in the Twentieth Century* (Anderson 1985).

Recommending a work in the philosophy of linguistics is even more difficult. Virtually all current work on the topic is written by partisans of Chomsky's Minimalist Program (for example, Hinzen 2006 and Boeckx 2006). The impression that these works try to give is that minimalism is scientific practice incarnate. I do not share that view (see Newmeyer 2008). Essentially, minimalists strive to make one small aspect of grammar (the narrow syntax) as 'clean' as possible, but ignore the ensuing complications in other domains of grammar. The first few chapters of Ray Jackendoff's recent books (see Jackendoff 1998; 2002; Culicover and Jackendoff 2005) offer a picture of linguistic methodology that I largely agree with, though I think that he and Culicover overstate the 'simplicity' of syntax. All in all, I still have to say that the best overall works on linguistic philosophy are Chomsky's epoch-making *Syntactic Structures* (Chomsky 1957) and the review of that book by Robert B. Lees (Lees 1957).

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