Language Universals: Abstract but not Mythological

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Abstract: I present the so-called Verb-Object Constraint as a serious proposal for a true linguistic universal. It provides an example of the kind of abstraction in linguistic analysis that seems warranted, of how different languages can confirm such a universal in different ways, and why approaches that avoid all abstractness miss important linguistic generalizations.

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I agree with E&L that natural languages display an amazing diversity, and this has great significance for Cognitive Science. Like them, I have devoted myself to studying this diversity.

But I do not agree that the descriptive data becoming available refute the Chomskian notion of a rich Universal Grammar. On the contrary, each new language I have studied presents *both* fascinating new examples of diversity *and* important new evidence that human languages are all variations on the same theme. E&L are looking at only one side of this paradox.

The root of the paradox is that—according to generative linguistics—natural languages are properly described at several distinct levels of analysis (Chomsky, 1957, 1965). Given this, it is perfectly possible for new languages to demonstrate diversity at one level and uniformity at another. It is easy to imagine how "comparative architecture" might find that the façade designs of buildings vary much more than expected, whereas fundamental structural support systems vary very little. This is parallel to what I believe comparative linguistics shows us about language.

As an example (synopsized from Baker (2001; In press)), consider (1) as a possible linguistic universal:

(1)   *The Verb-Object Constraint (VOC)*: A nominal that expresses the theme/patient of an event combines with the event-denoting verb before a nominal that expresses the agent/cause does.

One obvious reflection of the VOC in English is that (normally) objects immediately follow the verb, the two forming a verb phrase, whereas subjects do not. Comparison with other languages shows that many (35% (Dryer, 2005)) are like English in this respect—but also that many have a different word order, or no fixed order at all. At this level of description, there is substantial diversity.

Nevertheless, we find other reflections of the VOC in language after language. For example, some 40% (Turkish, Japanese, etc.) have Subject-Object-Verb order, with the object left-adjacent to the verb rather than right-adjacent to it. This is different from English, but equally consistent with the VOC.

Languages with Verb-Subject-Object order (7%) look like violations of (1), but careful research has shown that many of them (at least) are not. For example, Irish clearly has [Subject+[Verb+Object]] structure when there is no tense marking; Verb-Subject-Object order arises only when the verb needs to combine with tense (McCloskey, 1991); see also Chung 1998 on Chamorro. These languages thus support the VOC, understood as holding at an abstract level.

Mohawk is a language where word order gives no evidence of constituency. But Mohawk also has noun incorporation, where an argument can combine with the verb to form a compound. Crucially, the theme-object of the verb can incorporate into the verb, but the agent-subject argument cannot: Mohawk (and Bininj Gun-wok) allows 'The baby meat-ate' but not '*Baby-ate the meat'. This is another manifestation of the VOC, the compositional asymmetry showing up at the level of compounding rather than phrase formation (Baker, 1988, 1996).

Unusual features of newly-described languages can reveal universal properties in new ways. Kayardild has the very rare property of copying tense marking onto every constituent related to the verb phrase (Evans, 1995:399-401). Strikingly, this marking shows up on the theme-object, but not on the agent-subject (see E&L's (16))—new support for the VOC.

Including minor types (like Verb-Object-Subject languages), we now have solid leads that the VOC is valid for well over 90% of the known linguistic diversity. And I know of no counterexamples that been investigated directly by mutually-correcting research communities that include some researchers open to using abstractness.

The descriptive and typological research that E&L draw on summarily rejects most abstractness in linguistic analysis. E&L say it is a misconception that the differences among languages can be resolved by postulating a more abstract formal level, declaring this to be a false dogma. But the only support they give for this declaration is saying that "the experts either cannot formulate it clearly or do not agree that it is true." There is a real issue underlying this: it is a serious intellectual challenge to find exactly the right formulations of principles like the VOC (or Subjacency, or the Binding principles). Generativists thus offer different formulations, and do not claim to have found the definitive ones yet. But these formulations share a common core. Saying that Universal

Grammar is false on these grounds is thus like saying (as some do) that evolution is false because experts disagree about the details.

The challenge and opportunity of finding the right statement of universals can be seen in the putative contrast between "dependency" languages and "constituency" languages, which E&L emphasize. I find it striking that the dependency relations they identify for Latin in (14) are *exactly* the same as the dominance relations in the phrase structure of the English equivalent in (13). We can thus isolate something substantive that these allegedly different language types have in common by finding a neutral mode of representation that expresses this important topological equivalence.

E&L also voice the widespread concern that abstractness allows generative theories to immunize themselves from counterexamples. No doubt this happens. But the VOC is not an unfalsifiable dogma for generativists. On the contrary, they have seriously considered alternative possibilities. For example, Marantz (1984) proposed that the VOC is feature of language that varies parametrically, to account for "deep ergative" languages like Dyirbal. This hypothesis was investigated, but the preponderance of evidence showed it to be false, as more data came in from languages like Inuit (Bok-Bennema, 1991). That the VOC is universal is simply the hypothesis that has fared better empirically than any well-articulated alternative.

Note that if the VOC is universal, this is certainly of great interest to Cognitive Science. *Why* should verbs combine with their theme arguments before their agent arguments? It is easy to write formal languages that do it the other way around. Presumably this tells us something contingent and potentially profound about how humans mentally represent events.

Linguistic universals are thus not myths, but hypotheses—hypotheses that gain new support from much of the same research that E&L cite. This research shows that we cannot be superficial in our approach to language, not that we cannot be universalist.

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