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Review

## How not to find linguistic universals

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What does it mean to counter-exemplify a linguistic universal? In the sense that it matters here, a linguistic universal is something stated on properties unique to linguistic form, and if Evans and Levinson are right, it is pointless to look for these, since the set of such properties is empty. They contend that 50 years of generative grammar have produced no evidence of universals pertaining to linguistic structure, that it is long past time to quit, and that cognitive science has been misinformed about the success of the linguistic enterprise, particularly the view that there is any principled form to language that arises from any human ability that is specifically linguistic. I think that they are mistaken on all counts and that their view of how linguists are to proceed in the face of linguistic diversity is a straightjacket which will be an impediment to discovering the true richness of the diversity they celebrate. On the contrary, with a short demonstration I will support the view that the richness of linguistic structure is both evidence of our innate capacity and that a linguistic research paradigm that appeals to abstract, specifically linguistic, entities is the right partner for modern science applied to other cognitive domains.

The real issue here concerns what the best practical way is to proceed to answer a scientific question about what makes humans capable of learning and inventing human languages. Although there is much I disagree with in E&L's essay, I will focus here on the somewhat skewed interpretation they have of the notion 'linguistic universal' and on the sort of evidence they allow as counterevidence to any linguistic generalization. Let us proceed to a particular case of counter-exemplification E&L discuss and reflect more on it subsequently.

There are a number of instances where E&L attack theoretical proposals that are not currently upheld by anyone, and so they might be accused of flogging dead horses, but with respect to the island facts that were, in the 1980s, regarded to be the result of a universal, namely, the subjacency principle, the issue is more subtle. It is important to recall that the existence of island effects, many of which are first detailed in Ross's famous (1967) dissertation, was a major discovery of generative grammar. Chomsky had shown that in English, and as we now know, in a wide variety of languages of the world, questions and/or relative clauses can be formed over a distance of many clauses where a relative pronoun or interrogative phrase is displaced from a position that can be empty, although the displaced phrase is interpreted as originating in the embedded clause. Chomsky proposed a movement operation to explain the correlation between the interpreted gaps and the position in which the displaced phrase is pronounced and that movement could occur over a potentially infinite distance. Ross showed that certain *kinds* of intervening syntactic structures prevented such movements.

Subjacency (a restriction on crossing too many phrasal boundaries in a single movement operation) is a theory of locality designed to explain why certain structures should create inescapable domains (islands) for movement. The

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'Wh-island Constraint' was a descriptive statement about one such island to the effect that wh-movement could not occur out of an embedded interrogative. Without going into details, subjacency predicted that if a local movement is blocked by the presence of the embedded interrogative phrase, then movement skipping over that position was not possible.

- 1 a) the man [who I knew [that Mary had met \_]]  
b) the man [who I knew [how Mary had met \_]]

The second of these sentences was regarded as deviant, being \* for some and less unacceptable for others but all agree that (1b) is degraded by comparison with (1a). Rizzi (1982) purported to show that the same superficial effect did not appear to hold in Italian, but argued nonetheless that subjacency was still a factor in predicting the difference and that it held when more subtle structures were examined. For Italian, he argued, the locality calculation was different. Ideas about how the subjacency effect is to be derived have changed, but it is important to understand what this history was really about.

First, the discovery that Wh-island effects are variable was also a discovery of generative grammar, driven by hypotheses in generative grammar which let to subtle predictions that could be tested. Second, further study suggested that facts of English turned out to be more like Italian for some speakers. The actual cases where the Wh-island effect was violated in Italian involved infinitives, and many find similar extractions in English less deviant than (1b) (see Chomsky, 1986:37).

- 2) the cousin [who Mary wondered [how to talk to \_]]

Such cases raised questions about differences between infinitives and full tensed clauses that may not vary as much as was originally thought for certain classes of languages, although certain crosslinguistic variability is still attested for Wh-island effects.<sup>1</sup> None of this would have been discovered without the hypotheses that existed about an abstract notion that could or could not be defended based on a more subtle interpretation and analysis of the facts.

The third point is that some island effects, whatever principles or conspiracies bring them about, still appear to be persistent for every language that has been carefully investigated. Let us consider an even more specific, and hence more refutable, version of an island constraint, namely, the subset of Complex Noun Phrase Constraint cases that are described by the generalization in (3).

- 3) There is no extraction from the non-nuclear near subject of a relative clause.  
4) \*Do you remember the men [who Mary said [the dinner [which \_ were eating \_]] was disgusting?

Most generative theorists believe that island constraints do arise from blockage of the stepwise process that relates the gap in the lower clause to the highest position, whether that process is interpretive or operational, looking up or down the tree according to one theory or another, i.e., *there is an abstract locality constraint sensitive to syntactic structure* that is violated when extractions like (4) take place. Subjacency was just one version of such a locality constraint, but we will assume that the core claim is that *some* locality constraint is responsible for (4) and that constraint in question, if it is interesting, also applies to cases other than (4).

But now let us refute the relatively superficial, though surprising, generalization in (3).<sup>2</sup> The following examples from Italian (Rizzi, 1982:58) and Spanish (Jaeggli and Safir, 1989:16) show a displaced constituent that is interpreted with a gap that is embedded in a relative clause like the one in (4).

- 5 a) %Gianni, che non ho mai realmente creduto alla voce che fosse morto, è infatti vivo e vegeto  
"Gianni, that I have never really believed the rumour that (he) was dead, is in fact hale and hearty.  
b) Ese es el tipo que María conoce a la mujer con quien?el/0 se casó \_  
That's the guy who Mary knows the woman who he/\*0 married \_

If we are willing to accept this fact at face value, and that is all that E&L will allow, then (3) is not a universal, which is unsurprising to E&L, because there are no universals (and if so, why should we have ever bothered to look for them?). However, the acceptability of (5a,b) is slightly degraded in the same way that other relative clauses are in Italian and Spanish

<sup>1</sup> As Martin Everaert reminds me, extraction of adjuncts from Wh-islands is still robustly forbidden in the world's languages (see, in particular, Huang, 1982), or at least those that overtly extract Wh-phrases. It is impossible to interpret *How often was John wondering how to change the oil?* as a question about how often John changed the oil in whatever manner, but rather it is a question concerning how often John wondered about how to change the oil. Compare *Which of his cars was John wondering how to fix?*, which also has only one interpretation, but one which violates a Wh-island, and is completely acceptable for speakers like me.

<sup>2</sup> I am setting aside, here, the obvious point that it is hard to see how a child could ever get positive or direct negative evidence that (3) holds in any language in the normal course of language acquisition, that is, I am setting aside the usual poverty of the stimulus argument that asks what it would take for a child to expect (3) to be true if innate principles do not guide the acquisition of language competence. Arguments of this kind for generalizations like (3) remain unaddressed and therefore unrefuted by E&L, even though they are foundational in the reasoning of the generativist tradition.

when they are related to a resumptive pronoun as they are in popular speech. As Ross pointed out long ago, resumptive pronouns are not susceptible to island effects.<sup>3</sup> The resumptive pronoun that corresponds to the higher relative clause nucleus, is in the subject position of a tensed sentence, a position where pronouns are typically omissible in Italian and Spanish (but not in English), particularly when they are old information.

- 6 a) Ho trovato il libro (Italian)  
have found the book  
“I have found the book.”
- b) Dijo que mató al perro (Spanish)  
said that killed the dog  
“He/she said that he/she killed the dog.”

Since we know that whatever the relevant locality principle that accounts for (3), it must be adjusted to allow for this difference between resumption and true extraction if it is to be consistent with the facts, i.e., locality applies to extraction, not resumption. If Rizzi and many others are right to assume that Italian has a null (i.e., silent) pronoun in subject position, then the acceptability of (4) is no longer mysterious at all, and no longer poses a counterexample to (3). Structures like (4) are just resumptive relative clauses (as Rizzi maintained all along).<sup>4</sup>

While the resumption + null subject analysis could straightforwardly be appealed to as a way of dismissing an apparent counterexample to (3), E&L only allow for surface facts in their linguistic argumentation. If they were to allow that the counter-exemplification is only apparent here, then they would have to admit that there are null subject pronouns and that there are abstract differences between extraction constructions and resumption constructions. What kinds of differences are these if they are not quintessentially linguistic, quintessentially syntactic differences? Either E&L must claim that cultural practices condition the formal difference (not just the difference in usage) between resumption and extraction with respect to complex nominals that embed clauses and extract their subjects, where ‘extraction’, ‘subject’, ‘resumption’, ‘nominal’ and ‘embedded clause’ are (in their alternative, unstated theory) not linguistic terms, or else they must appeal to something that is an explicitly linguistic capacity of humankind. Most linguists understood the significance of this point 40 years ago.

Their treatment of the island issues is not an isolated instance of their reasoning (though it is striking because the facts and the analysis of them have been well-known for 30 years). One of the supposed counter-exemplifications of the universality of recursion shows off just the sort of determined superficiality they champion. E&L claim that Kayardild has a morphological restriction that requires an oblique case affix on embedded clauses that cannot be further affixed to, but must be if embedding were to go any deeper. Thus embedding is never more than one clause deep. Let us suppose they are right about the facts of Kayardild. Their conclusion is that the language does not have recursion, but their analysis suggests just the opposite. Superficially, *the effect of the recursive mechanism* is not observed because of another restriction in the language that renders recursive structures ineffable. It would be thoroughly compatible with their analysis of the facts to posit a role for operations that generate recursion in this language, but the effects of it are obscured by independent factors. But this is not what they take to be significant. *On the surface* we do not see recursion. *On the surface* we see (3) counter-exemplified. Now it could be that there are real counterexamples to (3), or even to the principles or the conspiracies of principles that bring (3) about, but we will never know for sure unless we show some skepticism about what is superficially true.

E&L are committed to arguing that if one pattern obscures another, then only the most superficial analysis is empirically trustworthy—the obscured pattern is not open to scientific inquiry. The motivation for abandoning the search for universals thus implies the abandonment of linguistic analysis in any substantial sense. It is hard to see how E&L’s commitment to superficial linguistic analysis would recommend them to be a better partner for the broader enterprise of cognitive science than those who are committed to discovering what people know about the language that they speak, including what is abstract, and necessarily beneath the surface of linguistic phenomena.

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<sup>3</sup> Aoun et al. (2001) have further examined what constitutes ‘resumption’ by showing that island effects and reconstruction phenomena in Arabic pattern together to distinguish overt resumption by an epithet from ‘apparent’ resumption by an epithet—yet another instance where refinement of theoretically motivated distinctions led to the discovery of subtle empirical patterns.

<sup>4</sup> In casual speech, even some English speakers would accept (i), but more would simply say that they could see what (i) means and it sounds terrible. By contrast, (4) is quite hopeless.

- i) Do you remember the men who Mary said that the dinner which they were eating was disgusting?

The fact that native speakers can distinguish two sentences that they would claim they would never use suggests that their judgments arise from abstract principles that apply even where there is no practical result.

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