

Re: Universal grammar

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- *From:* "Rob Freeman" <groups@xxxxxxxxxxxxxxxxxxxxxx>
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Hans Aberg wrote:

In article <1161934779.658332.265010@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>, "Franz Gnaedinger" <frgn@xxxxxxxxxxxxx> wrote:

Back to language. What do you think of Rob Freeman's approach of a grammr based on examples instead of rules? I find it promising. That is the way I proceed in English. I don't consult grammar books, I rely on songlines and sentences I remember.

When I learned language, one focused much on grammar and spelling, but nowadays, one has realized that it is important to practice, practice and practice. The same as always has been known in say music performance.

It is easy to slip into thinking this is a learning issue. That is unfortunate, because with the assumption that we are talking principally about learning, comes the assumption there is something to learn (usually rules.) The "central simplifying generalization" I work with is not so much that we learn language from examples. It is that the examples themselves are what we learn, that the examples themselves are a particularly compact representation for a language (the most.)

So I'm mostly talking about the power of text to specify rules. It is not a theory of learning as such.

Though it does explain why historically it was not possible to fit text to a single set of rules, causing others, such as Chomsky, to conclude language could not be learned from examples (and propose an innate, Universal Grammar.)

In principle this idea does not say you could not learn a language from rules. What it does suggest is that you can find more rules over a set of examples than there are examples themselves. So you would not want to try! (Actually it says "rules" are sets of examples, so it would come down to learning examples, "paradigms", anyway.)

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I've always thought Mark Twain's very amusing "tongue in cheek" learner's perspective of German was a good expression of that "more rules than examples" complexity of a language in terms of rules (German speakers please don't take offense!)

http://www.boondocksnet.com/twaintexts/tramp_ap_d.html

Like Mark Twain you can try to explicitly learn classes of nouns defining genitive, accusative, nominative etc. uses of German articles (equivalently: paradigms of articles defining accusative, nominative, genitive etc. declensions of the nouns.) But after you have learned all these sets, you still need to learn all the sets of _exceptions_ ("wegen DEN Regen"?) Of which he claims there are more than there are not. And who can say what regularities there are among the exceptions, interleaving subsets among subsets. It is cheaper to just learn the examples, regular and irregular, and let all those sets (classes) shake themselves out in your head automatically.

That said, there can be a feeling of "learning by learning rules" when learning a closely related language. To the extent that works, I think it works only because the languages are closely related.

According to this theory a "rule" is a name for a (sub-)set of examples. When, for historical reasons, the sets are largely the same, it is possible to quote a rule and simultaneously "learn" (actually analogize in bulk from your own language) all the forms in that set.

It is perhaps easier to see that analogous sets are what grammatical labels give you when the sets are not strictly grammatical. So for example, a speaker of one European language learning another just needs to learn the word for, say, "that" (which usually functions equally as a determiner, a pronoun, a subordinating conjunction, and the basis of articles when they exist...), "which" (also functions commonly as all of a determiner, a pronoun, and a subordinating conjunction across languages), "and" (which always lets you both list and conjoin to build arbitrarily complex phrases), and he or she already has bones for the language. These are lexical regularities, but the principle is the same for the structural regularities we think of as grammar. For mainly historical reasons labels like tense and mood in most European languages, e.g. the conditional, define sets in one language which correspond to strictly analogous sets (or paradigms) in another. What you are doing is importing, in bulk, whole sets of analogous examples. For a while you have to do this consciously, example-by-example, then you feel you are "talking by translating", but after a while you remember the examples themselves, then you are "thinking in the language."

It doesn't work when the sets are not the same. When learning a truly unrelated language, not only does learning a rule not allow you to import a set of examples in bulk. Without the corresponding set of

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examples it is not even possible to conceive the rule (much as those with no experience of a "tone" language find it difficult to conceive "tone".) Someone can tell you that to build a well formed Japanese sentence you need to decline conjoined clauses as adjectives, and decline the whole, like a word, for courtesy, but without a few examples that does not "mean" much.

The more languages you learn, the easier it becomes, because you have more "sets" to refer to by analogy.

So, those are a few learning implications of the model. But as I say, they are not central.

What is central is the complexity argument, which says examples are the most efficient way to store all the grammatical generalizations you can make about a language.

"There are more patterns in text than can be captured by any one summarization."

–Rob