

Grammar: Rules or Patterning?

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What is grammar? Grammar has been traditionally thought of as a large number of rules that describe the syntax of a language, typically at the sentence level. Indeed, virtually every grammar book describes such rules. However, I like to think of grammar in broader terms. Instead of limiting myself to the traditional realm of grammar, I like to think of the total systematicity of language, that is, everything that is systematic and regular about language. Of course, there must be regularity in language; otherwise every person would be constructing it in different ways, leading to a total breakdown in communication!

Language systematicity extends from the smallest components all the way up to extended discourse. But when we look at the various levels of language, the systematicity we find often does not conform to absolute rules. There always seem to be exceptions that spoil any attempt at a rule-based description. (It is probably better to think in terms of probability-based *regularities*, instead of fixed *rules*, but even regularities do not always adequately describe the behavior of language.) There is also an element of widespread *patterning*, which often accounts for the systematicity of language better than rules do.

Let us look at the various levels of language from a patterning perspective. In writing, the smallest unit is letters, and they combine to make up syllables and words in certain ways. Below is a list of six words, some of which I made up and some of which are real, but very low frequency. Can you tell which is which?

<i>prolificity</i>	<i>hgough</i>
<i>tcharal</i>	<i>nulliparous</i>
<i>quintain</i>	<i>louqt</i>

Although it is unlikely that you were familiar with any of these word forms, your intuition probably suggested that *tcharal*, *hgough*, and *louqt* are not real words. The thing that probably seemed strange about these word forms is the unusual consonant clusters: *tch* and *hg* are not productive clusters at the beginning of English words, and *qt* does not normally end words. These are not fixed spelling rules (someone could invent something and name it any of these word forms), and you almost certainly did not learn from any textbook that these clusters are "incorrect." Still, when I do this activity at presentations, the audience is always able to spot the word forms that do not contain the normal patterning of English spelling. Thus, even at this most basic level, it seems clear that there is systematicity in language, and that it is governed at least to some extent by patterning rather than rules.

We find similar patterns at the level of morphology, where suffixation often does not conform to any firm rule. Of course there are some fairly regular transformations. For example, changing verbs ending in *-ate* (*punctuate*, *elevate*) into nouns normally results in *-ion* forms (*punctuation*, *elevation*). However, many transformations fall into a number of patterns rather than come under any single rule. For instance, the noun form of adjectives ending in *-al* can end in *-ness* (*casual* > *casualness*) or *-ity* (*formal* > *formality*), or be in the root form (*influential* > *influence*).

At more global levels of language, patterning becomes even more significant and also harder to identify solely by intuition. Let us examine the word *border* to illustrate this. If your students ask what *border* means, you would probably say something like "the edge or boundary of something." You might also show them various inflections of the word (*bordered*, *bordering*, *borders*). Because inflections are usually considered a grammatical change, you might assume that they all have a similar meaning in context. But you would be wrong.

If we look at the behavior of the *border* word family in the British National Corpus (BNC; a 100-million-word corpus of English), we come up with the following figures:

	BNC frequency	X + "on"	Figurative sense
border	8,011	89 (1%)	
borders	2,539	84 (3%)	
bordering	367	177(48%)	71%
bordered	356	99 (28%)	75%

From these figures we can see that *border* and *borders* (mainly noun forms) are the most frequent members of the family, which is not at all surprising as most word families have more and less frequent members. However, once we put the words into phrases (in this case by adding the preposition *on*), the behavior changes dramatically. Only 1 to 3% of the cases of *border* and *borders* occur in combination with *on*, but about one quarter of the occurrences of *bordered* do, as do almost one half of the occurrences of *bordering*. Clearly there is a strong tendency for *bordered* and *bordering* to occur in a pattern with *on*. But the patterning not only involves the combination of the words; it also affects the meaning. Whereas *border* and *borders* almost always refer to the expected or literal meaning of "edge" or "boundary" (even when in combination with *on*), in about three quarters of the cases, *bordering on* and *bordered on* refer to some figurative meaning not to do with edges or boundaries. In fact, when we look at concordance lines from the BNC, we find quite a different usage:

- His passion for self-improvement bordered on the pathological.
- But his approach is unconscionable, bordering on criminal.

For further evidence of this usage, here are some other words that occur to the right of *bordered/ing on*:

a slump	arrogance	chaos
a sulk	austerity	conspiracy
acute alcoholic poisoning	bad taste	contempt
antagonism	blackmail	cruelty
apathy	carelessness	cynicism

There is clearly a pattern here, and I would suggest that it is something like this:

SOMETHING/ (be) *bordered/bordering on* AN UNDESIRABLE STATE
SOMEONE (OFTEN OF MIND)

The main point of these examples is that there is a systematicity around the use of *bordered* and *bordering* that is not captured by a traditional grammatical description. The structure (noun phrase + BE + *bordered/bordering* + preposition + noun phrase) does not really tell us much about the way these words are used. In contrast, the above pattern-based description tells us much more about how the words are used in context and what they mean.

I do not want to give the impression that rules are not an important part of grammar, or that the mind does not have access to some kind of rule-based system. However, I hope that I have shown that the systematicity of language is not solely rule-based, and that a large degree of patterning is present that is not described well by rules. In fact, the more we look at corpus evidence, the more patterning we find. We may discover in the end that patterning actually makes up the majority of the systematicity of language, with rules coming into play only when insufficient patterning is available. But whatever the case, patterning is a key component of language, and any view of grammar needs to take this into account.

Acknowledgment: John Sinclair did the original analysis of "border" upon which this expanded version is based.

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