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## 1 Language and cognition

We probably all share an interest in syntax, so we would surely have a clear and certain answer to the question: what is syntactic structure like? Is it based on dependencies between words, or on phrases? What kinds of relations are there? And so on. But before we can answer relatively specific questions like these, we must first answer a much more general question: What kind of thing do we think language is? Or maybe: Where do we think language is – nowhere, in society, in our minds? Our answer will decide what basic assumptions we make, and how our discipline, linguistics, relates to other disciplines.

Is language a set of abstract patterns like those of mathematics, without any particular location? This is a popular answer, and makes a good deal of sense. After all, what is language if not abstract patterning? The patterns made by words in a sentence, or by segments in a syllable, are certainly abstract and regular, and can be studied as a branch of mathematics – as indeed they have been studied and still are studied in linguistics. For some researchers who take this approach, the aim is elegance and consistency, so in a competition between alternative analyses, the prize goes to the simplest one. For others, though, the goal is a working computational system, so the criterion is some kind of efficiency. One problem for this approach is that the material in which these patterns are embedded is inescapably human activity; in contrast with mathematical patterns, linguistic patterns only exist because humans create them. And another problem with the mathematical approach is that it provides few explanations for why language is as it is. If language's patterns always turned out to be the most elegant possible patterns, the mathematical approach would indeed explain why, but they don't, and as we all know, language can be frustratingly messy.

Another possible answer is that language is a set of conventions that exist in society. For some

linguistic theorists, this view of language has been dominant since Chomsky and Lakoff (1977) and their like proposed very simple language "universal" properties, however. In fact, that theoretical consensus of 1977 has been shattered by all the research on the methods of collecting and analysing language found since. Similarly, some sociolinguists see the social patterning of language as belonging to the past, now, though not to any of its members (cf. also 1977). The crucial issue is that although language is definitely much harder to analyse and much less homogeneous than we might expect, and once again, the basic data are increasingly individual products – individuals speaking and listening to each other.

The third answer – and this is my preferred option – is that language is an example of individual knowledge. As in the first answer, the knowledge becomes mathematically expressible patterning, and as in the second, it has a strong social dimension – after all, we learn the knowledge from others in our community, and we reveal our knowledge through our own social behaviour as speakers and listeners. And ultimately, language is a mirror of individual psychology. We speak it as individuals, we are more individuals, and others know us as individuals, through it. Who could deny that, and yet the other views of language may have very influence, and still are.

As an instance, compare its influence, take the criterion of elegance or simplicity. This is very widely accepted in linguistics, and those of us who support dependency structures might argue that one of the advantages of our approach, in contrast with phrase structures, is its simplicity. Just count the nodes! We mean precisely one node per word, whereas a phrase-structure analysis requires all these nodes under plus extra nodes for the phrases. But is this criterion really relevant? If we were physicists, it certainly