

Do all things in nature have a cause, and in case they do, can they be discovered by man?

Donegan & Stampe (1979) believe that the very idea of Universal Grammar (UG) is misled and, to the extent that its content may be identified, uninformative. The goal of inquiry about language, they contend, should be explanation, rather than description. The generative ambition to discover a means to generate all and only those languages that are possible is descriptive in kind: the day we possess this algorithm and know about the content of UG, we still do not know why the algorithm is the way it is, why UG has the properties it does, rather than any others. Hence Natural Phonology "is intended to *explain* its subject matter, to show that it follows naturally from the nature of things; [...] it is not intended to *describe* its subject matter exhaustively and exclusively, i.e., to generate the set of phonologically possible languages." Donegan & Stampe (1979: 127, emphasis in original).

This is the heart of the NP critique of chomskyan UG: science is about discovering causalities, not about describing what occurs and what does not. This question taps into the philosophical debate of whether or not there are things in nature that are unknowable – unknowable by human endeavour in principle and for all times, not just because of past, present or future circumstances such as insufficient technological advance.

Fodor's (1983) *Modularity of the Mind* has produced a debate about the unknowable. According to Fodor, the mind is made of modules (lower functions: 5 senses, language, non-teleological) and central systems (higher functions, teleological). Fodor is pessimistic about our ability to understand how central systems work: he assumes that they are resistant to scientific theorising and ultimately to human understanding. The opposing view is taken by Pinker (1997), Sperber (2001) and others: these authors believe that central systems are not out of reach and that their workings may be understood. According to Sperber's Massive Modularity, central systems will turn out to be modular as well.

Chomsky (1984: 7) sides with Fodor: it is not the case that everything in nature in general, and in language in particular, has a cause. Or rather, has a cause that man can understand. On this view, it is consistent to believe that properties of UG have no cause, at least none that humans will be able to identify. Therefore the objection against UG saying that everything including UG has a cause that needs to be identified does not bite: UG may be one of those things in nature that are irreducible to anything else and for which a description is as far as scientific inquiry can get.

The existence of this kind of irreducible properties that make no sense and have no cause is undisputed in natural science: there are dozens of so-called physical (or natural) constants that shape the laws of physics, chemistry and biology, among which the speed of light c , the gravitational constant G , the Planck constant h , the elementary charge e or the mathematical constant π . They do not follow from anything and the undisputed understanding in scientific quarters is that determining their values is all that humans will be able to know about them.

Keywords

Universal Grammar

the unknowable

modularity

description vs. explanation

natural constants: speed of light, π , etc.