

Noam Chomsky on

LANGUAGE

by Aaron Stark

Why should one be interested in studying language? Noam Chomsky's answer to this question in part characterizes the importance of his linguistic theories to modern thought. In his view, to truly study language is to study a part of human nature, manifested in the human mind. What does he mean by this? To begin, one has to understand what Chomsky thinks the nature of human languages actually is, and why it is so interesting. One of the fundamental aspects of human language, according to Chomsky, is its creative nature. The last sentence (and, in fact, this one) have probably never been produced before in the history of the world. The same is true for much of what we say every day. So, we do not seem to learn or to speak language by purely imitating other people.

How are we able to judge whether a sentence sounds okay? Can we literally have a list of sentences in our mind against which we check each new sentence we hear? Chomsky argues not, since our brains are finite but English is potentially infinite (consider the sentences "I like the number one", "I like the number one and I like the number two", "I like the number one and I like the number two and I like the number three," etc.).

Can we process each new sentence by analogy with ones that we've heard before? Chomsky argues that this is not possible either, since, he claims, analogies are too loose to explain our understanding of complex sentences. For instance, if we remove the last two words of the simple sentence "Abby is baking vegan muffins" we get a sentence that means she's baking *something* (maybe muffins, maybe not). But if (by analogy) we remove the same words from the complex sentence "Abby is too tasteful to pour gravy on vegan muffins" we get "Abby is too tasteful to pour gravy on," which should (by the analogy) mean she doesn't pour gravy on *something*, but instead means that no one should pour gravy on *her*.

In contrast to these alternate theories, Chomsky argues that we can make these judgements because we possess an abstract system of unconscious knowledge about our language. This system of knowledge includes, for starters, knowledge about sentence structure and word order (we know that "Bites the dog man" is not the way to express the meaning that the dog is biting a man). It also includes knowledge about meaning (we know that when we speak of a brown house, it is the outside of the house that is brown, not the inside), and knowledge

about sounds (we can tell when someone is speaking with an accent not our own). Chomsky argues that this knowledge of language is separate from other types of knowledge that we have; that we don't just use general-purpose strategies (like analogy) to make the judgements that we do. To possess this kind of knowledge, says Chomsky, is what it means to "know English" (or any other language).

How do we come by this knowledge of language; how do we learn our native language? It's not likely that parents explicitly teach kids these rules in the cradle. And, because of both the abstractness of the rules and the complexity of the samples of languages that even infants hear, Chomsky doesn't think that general smarts can do the job either. (Children with otherwise severe learning difficulties often learn language easily.) Instead, he argues that something specifically about human language must be innate—that is, available to us by virtue of being human, specified somehow in our genetic makeup.

Chomsky is not saying that humans are born with English or Vietnamese or any other language 'hardwired-in'. These innate properties must be properties available to all human languages. According to one theory, these properties are composed of principles and parameters—what is called 'universal grammar'—principles being universal to all human languages, with cross-language variation accounted for by parameters each of which can be set in any of a small number of ways, like a light switch that can be turned on or off. Learning a language, in this view, means setting parameter values; setting the switches in a particular way.

So how do Chomsky's theories of knowledge of language and how we come to know it relate to the study of human nature? As one might guess, he rejects the view of the human mind as a blank slate at birth, filled in by experience. Rather, Chomsky suggests that components of the mind, including language and other systems of knowledge, are largely innately determined. Experience (of one's culture, language, etc.) does not fill a blank slate, but instead interacts with innate properties to form 'competence' in these different systems of knowledge. All these components interact with each other, or are linked in unknown ways to form the object of vast complexity that is the human mind.

Chomsky's theory of language and mind has been influential on scholars in many different fields—cognitive psychology, philosophy, some branches of mathematics. Even in the U.S. where his theories have perhaps been the most influential, there are many competing models of language and the mind. While some who object to Chomsky's arguments seem to misunderstand his theories, naturally many have genuine dis-

agreements with some of his assumptions. But most, perhaps, would recognize some of his general contributions to the modern study of the mind. Chomsky has shown that the study of the mind cannot limit itself strictly to the examination of behavior. The concept of an unconscious 'knowledge state' is not unscientific, as some other modern theorists of mind have assumed. Instead, such concepts are essential in order to account for the complexity and creativity exhibited by the normal human mind—a mind that each of us possesses. ☑



Noam Chomsky is cornered by University of Michigan students Bisan Salhi, Will Youmans, and Nazarene Syed after a recent public lecture to benefit high school union organizing in Fort Wayne, IN.

