



CHOMSKY'S
TWO
CONTRIBUTIONS
TO PHILOSOPHY
BY J.-M.
KUCZYNSKI



Chomsky's Two Contributions to Philosophy

J.-M. Kuczynski PhD

Noam Chomsky's two contributions to philosophy are:

1. The so-called poverty of stimulus argument for the existence of pre-experiential knowledge, and
2. His argument for the existence of sub-personal thought.

Let me explain each of these two points.

Consider the various auditory and visual perceptions that led to your knowing how to use and understand language. And consider the various optical and acoustical phenomena responsible for those perceptions.

If you bombarded a rock, or a chair, or a tree with those same sounds and patterns of light, would it learn a language? If such a thing were placed in circumstances exactly like those that led to your being able to understand this very audio, would *it* be able to do so?

No.

In all likelihood, any given item of furniture in the house where you grew up, was exposed to just the sort of optical and acoustical disturbances that, in you, led to the ability to use and understand language.

What about a dog, a cat, or a squirrel? If such a creature were placed in circumstances just like those that, in you, led to your having the ability to understand these very words, would that creature be able to understand these words? Would it be able to argue with a spouse or negotiate with a business partner?

Of course not.

What's the explanation? Why do people learn language, and become so linguistically proficient on the basis of such a paucity of data, when a dog or a cat, not to mention a rock or a tree, cannot even acquire the most rudimentary linguistic competence, no matter how many noises or light-patterns of the appropriate kind it is bomarded with?

The answer is clear.

Because of your innate cognitive structure, you---unlike a cat or a dog, not to mention a rock or a tree---respond to those sounds and light-patterns in the right way. You derive knowledge from them. In you, but not in a cat or a dog or a tree, they trigger a constellation of responses that eventuate knowledge of a language.

The operative word here is 'trigger.' If you did not *ab initio* all but know a language---if your cognitive structure were not already there, in a very developed state, just waiting for a little bit of experience to 'turn it on', so to speak---then no amount of sensory stimulation would do the trick. If the structure of your mind did not, as it were, anticipate or prefigure the linguistic knowledge currently embodied therein, then no amount of teaching or conditioning would have led to its having that knowledge.

It is your mind's *innate structure* that enables your mind to acquire linguistic ability and, by analogous reasoning, to acquire *any* of the various forms of cognitive competence of which it is now in possession.

And since this pre-experiential structure is *cognitive* in nature, it follows that you have pre-experiential---or, to use the philosophical term, *a priori*---knowledge of truths on the basis of which you are able to organize the various experiences that you have and to distill their contents into the various forms of cognitive competence that you have (and that you have yet to acquire, but will).

'But I was not aware of these various cognitive operations of which

'you speak,' it will be said. 'I had experiences—I saw things, heard things, touched things, and so on---and---lo and behold---I could speak English, tie my shoes, play the piano, even do math and science.'

That is certainly how it seems to your conscious mind.

And, what's more, it's not as though, if you were subjected to psychoanalysis, you would then be conscious of the various cognitive operations posited by Chomsky, in the way in which psychoanalysis makes you conscious of your feelings towards a parent or co-worker.

The knowledge that Chomsky is talking about is not knowledge that your mind *has*; that knowledge *is* your mind. Knowledge that you *have* is knowledge that presupposes an existing cognitive structure. It is only if your mind is stocked with relevant categories and protocols that you are able to know what the capital of Delaware is or how Euclid proved there to be infinitely many primes. Knowledge that you have----knowledge that you *learn*, in other words---is *structure-internal*. It is internal to your existing cognitive structure.

The *a priori* knowledge that Chomsky is talking about is not internal to your cognitive framework: it *is* your cognitive framework. You are not aware of it, because it *itself* is your awareness.

Your knowledge that Wilmington is the capital of Delaware, or that root-2 is irrational, is the *object* of your awareness. The cognitive framework that enables you to have such knowledge is the *subject* to which that object is thereby known.

'But can't I be aware of myself?' it will be objected, and not unreasonably. 'Am I not aware of my feelings, my deliberations, and my thoughts? To be sure, I may deceive myself; I may rationalize; and I may even agree with Freud that my beliefs about myself are sometimes totally false. But it is a datum that, to a very considerable extent, I have a very direct,

and, in many cases, incontrovertibly accurate awareness of myself?’

Yes, you *are* aware of yourself---in the sense that you are aware of many of the feelings, thoughts, etc. *created by your cognitive architecture*. But all of the mental contents that you are aware of are *occupants* of that architecture. The feeling of sadness that you are now consciously experiencing will come and go. Yesterday, it didn’t exist; now it does; tomorrow, once more, it won’t. But *you* will be there all the same.

You might forget a given fact; you might even forget how to hit a backhand or derive an integral. But you---your cognitive framework---will still be there. Yes, you *are* aware of many of your thoughts and feelings and deliberations. And it may be even that the sort of ignorance of self discussed by Freud presupposes some other, more fundamental knowledge of self. In fact, if that weren’t the case, you wouldn’t irritatedly resist the correct but unflattering points that your therapist, or your friends, make about you. Beneath your rationalizations there is self-knowledge.

But all of this knowledge---this knowledge that you have of your sensations, perceptions, beliefs, deliberations, and so on---all of this is knowledge of the *contents* of your cognitive framework. The things known are to your mind *itself* what the occupants of a hotel are to the hotel. The hotel is one thing; its occupants are quite another. The structure of the hotel imposes strict and rigidly defined limits on the way in which people in the hotel can move about and interact; and if someone could see the hotel---occupants move about, but could not, for some reason, see the hotel itself, he could deduce from those interactions what the structure of the hotel was. Similarly, our cognitive structure can be deduced from our thought-patterns.

But those thoughts, perceptions, and feelings are not themselves that structure. They are its *productions*. They are to that structure what---to switch examples---a car factory is to the cars it produces.

And when you are, as we say, ‘aware of yourself’, the thing you are aware of is not, strictly speaking, your *self*. It is not, that is to say—your cognitive framework itself. Rather, it is some product of that framework.

And the knowledge *underlying* the knowledge that you aware of---the knowledge that Chomsky is discussing, the knowledge, in other words, that *is* your cognitive framework, rather than being a product of it---*that* is not the object of any instance of these misleadingly so-called cases of ‘self’-awareness.

And this is why the framework-constitutive structures and operations that mediate your learning and, in due course your using, language, and that mediate other forms of cognitive competence---that is why those structures and operations are, to use Chomsky’s term, *deeply* unconscious, unlike the contents of the Freudian unconscious, which are unconscious, but not deeply so.

‘But why posit all of this unconscious---nay, this *deeply* unconscious—cognitive structure?’, it will be asked. ‘Why not regard all of the structure involved in our acquiring knowledge and cognitive competence as being strictly physiological in nature?’

This point is best understood in terms of a fact about a language itself, a fact that Chomsky was one of the first to bring to light, and of which an analogous point holds of any given form of cognitive competence.

Consider the following two sentences:

1. John loves Sally.
2. Sally hates Fred.

There are two kinds of operations that we can perform on these sentences. On the one hand, we can combine them into larger sentences, for

example:

3. John loves Sally and Sally hates Fred.
4. Either John loves Sally or Sally hates Fred
5. John loves Sally because Sally hates Fred.

And so on.

On the other, we can break them up into parts and then combine those parts into entirely new sentences, for example:

6. John hates Fred,
7. John hates Sally
8. Sally hates John
9. Sally hates Sally,

and so on.

Languages are therefore both *productive*, meaning that linguistic expressions can be combined into larger expressions, and *systematic*, meaning that the parts composing complex expressions can be re-arranged to form other complex expressions.

Given that we use and therefore understand language, it follows that the systematicity and productivity of language are reflections of corresponding facts about our cognitive structure. Language is productive and systematic because our minds are productive and systematic. We can combine sentences that we understand into larger sentences that we understand, and we can rearrange the constituents of sentences that we understand into new sentences that we also understand, because we understand the relations of logical

dependence that map the meanings of sentence-parts onto those of the sentences thereby composed.

Obviously these cognitive abilities are *mediated* or *implemented* by physiology---by ‘wetware’ of some kind or other. And obviously all knowledge, whether pre- or post-experiential, is encoded in brain-structures of some kind or other, the same being true of all aptitudes.

But if we were dealing with *pure* physiology---as opposed to physiology that encoded insight and intelligence, that embodied an undersatnding of interrelations of logical dependence and of content-appropriateness---if *that* were the case, then experience, supposing we were even able to have it in the first place, would enable us only to respond to situations in a few stereotyped ways: we would not have the ability to keep pace, in our thoughts or therefore our deeds, with novelty.

Where there is pure physiology, as opposed to physiology that mediates that intelligence, there can be *training*, but there cannot be *teaching*. There can be *operant conditioning* but there cannot be genuine *learning*.

The fact that we can use language in the ways in which we can use it---and the very fact that we can learn it in the first place---is proof that these pre-experiential structural properties of ours are not physiological, but are rather *cognitive* in nature. That is to say, they are cognitive properties that are realized or implemented by physiology, in much the way in which a computer’s hardware implements its software.