Noam Chomsky: The new Galileo?

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Chomsky treats language as cognition, not communication. He says it enables us to think in unusually clear and powerful ways, planning ahead, comparing and evaluating our ideas and so on. But if so, wouldn't we have expected other large-brained animals – elephants, whales, dolphins, chimpanzees – to have benefited from some such feature? Why just humans? According to Chomksy, no other species took even the smallest evolutionary step toward language. In his account, Homo sapiens just appears on the scene with fully-developed language. No other species gets anywhere at all.

When I was writing my previous book, I decided to postpone the problem of language because I didn't understand it. I had absolutely no background in formal linguistics. In particular, I found Chomsky completely incomprehensible. I tried reading some of his stuff on syntax but quickly gave up. Only in the past few years have I come to realize that any subject you like can be made to look totally incomprehensible if you approach it in the wrong way.

In detail, Chomsky's theories are incomprehensible. I used to draw a comparison with nuclear physics, which for most of us seems difficult – but necessarily so. I tended to give Chomsky the benefit of the doubt, perhaps because I admired his moral courage in defending human rights, defying his own government during the Vietnam war and so on. I still admire Chomsky in those respects. But only slowly have I come to realise just how paradoxical and contradictory is the connection between his activism and his science.

Chomsky's scientific work is incomprehensible because it doesn't make sense. There is no valid comparison with nuclear physics or modern genetics. In those genuine natural sciences, no-one has to wait for the pronouncements of a single person before deciding in which direction their researches should turn. Instead, new developments are triggered as ordinary researchers put hypotheses to practical tests. Observations are made, results are tabulated, experiments are performed. Sometimes an elegant theory is destroyed by an anomalous result. From time to time, a whole new way of looking at the world emerges as previously isolated specialists discover that their different perspectives are beginning to converge. Then the whole landscape may be lit up for a while by a Darwin or an Einstein – someone who can pull it all together. The new and simplifying paradigm then takes over not because its inventor had any special authority but because people feel empowered by the new ideas.

Not absolutely everyone, of course – there will always be conflicts and disagreements. But the mark of a genuine scientific revolution is a whole new level of collective agreement. A new community emerges, more interdisciplinary and more representative than its predecessors. Perspectives converge because the new ideas are powerful – they evidently work. The new scientific community produces practical results. Its language – its distinctive terminology and concepts – proves, therefore, to be relatively stable. Fundamental axioms don't keep getting changed all the time by a particular individual.

Chomsky has often been likened to such scientific revolutionaries as Galileo, Darwin or Einstein. The comparison with Galileo is one that he has drawn himself. I admit that

history may arrive eventually at that verdict. Unfortunately, however, the prospects just now are not looking good. Since Chomsky published his Syntactic Structures in 1957, he has dominated linguistics in a somewhat unexpected way. Far from producing agreement across his discipline, he has produced terrible divisions – arguably the most bitter divisions in western intellectual history. Of course, Galileo produced divisions – all revolutionaries must do that. But the issue is: what kind of divisions? Galileo in his time was in a life-and-death struggle against ecclesiastical political authority. In a sense, then, the issue is whether Chomsky is our modern equivalent of Galileo. Or is he is today's equivalent of the Pope? This second alternative sounds shocking, but I believe a case can be made.

The first thing to say, without question, is that Chomsky is no Galileo. He doesn't make observations. He doesn't test hypotheses. He doesn't start with empirical facts. He doesn't inspire the feeling that any big picture is beginning to emerge. His followers are not a stable intellectual community – on the contrary, they keep falling out. He doesn't work with scientists in neighbouring fields. He doesn't develop a theory and then stick with it, as Galileo did with his moving earth. Instead, Chomsky keeps changing his theories, and in absolutely fundamental ways. When he changes his mind, it is never in response to a new empirical observation or experimental finding. On the contrary, he explicitly states that he is against any such concept of science.

Nor does Chomsky challenge the fundamental philosophical premises of today's dominant class. On the contrary, he is the most consistent, dogmatic and unreconstructed Cartesian since Descartes himself. Descartes proclaimed: 'I think, therefore I am!' No other writer can compete with Chomsky in celebrating and consolidating the premises of bourgeois individualism in philosophy and science. But whereas Descartes also contributed enormously to empirical research, Chomsky relies essentially on private intuition. It is no exaggeration to say that he is against empirical linguistic research. He dismisses it because, he says, it can only be relevant to external performance — which is of little interest to him. When studying language, therefore, he doesn't recommend observing how people speak. Instead, he sets up a parallel universe. Everything of interest happens on that other plane.

By 'language', Chomsky doesn't mean what you or I might mean by that term. He doesn't mean French or Swahili and he certainly doesn't mean people conversing or exchanging ideas. Instead, he means a natural object located in the head. Call it Universal Grammar. How are we supposed to elucidate the properties of this most peculiar object? We know by definition that it is uniquely human. Also, according to Chomsky, it could not have evolved by natural selection. Although real and objective, it is strangely immaterial – abstract rather than embodied. Another curious feature is that it is perfect – the kind of thing a 'divine architect' (Chomsky's words) might have devised. Is it, then, something akin to the soul? That was certainly Descartes' solution to the mystery. To work out its detailed specifications, Chomsky recommends intuition. Whose intuition? Not mine and not yours, since we are insufficiently qualified. As we

navigate laboriously through the highly technical literature, we are given no choice but to rely on Chomsky's own. There is no other source.

So is Chomsky more Pope than Galileo? I have come to that conclusion. I think Chomsky is doing religion, not science. But of course we are talking about a relatively new kind of religion, not the earlier feudal kind. Despite the recent resurgence of Christian and other fundamentalisms, the most effective and universalistic modern legitimating ideology is not patriarchal monotheism but bourgeois liberalism and individualism. In the modern world context, 'science' conceived within this individualistic framework – the framework established by Descartes – can be invoked as a source of authority and legitimacy very much as earlier generations might have invoked God. The science in question obviously cannot be Marxist. Neither can it accommodate Durkheim or any other tradition within social science. If natural science were sociological, it would question its own most fundamental assumptions – asking, for example, how scientific communities are formed, under what political pressures they select their research priorities and how they socially construct their shared knowledge. No religion can allow that kind of thing to occur.

This leaves natural science as the only alternative. It is for this reason that Chomsky has to define linguistics as a strictly natural science. Only this kind of science can be construed as above politics and transcendental in its objectivity – a 'God's-eye' view of the world. The slightest sociological contamination might shatter that precious illusion. In order to leave no hostages to fortune, Chomsky redefines language completely. Communication, according to his new definition, is quite irrelevant. The object of linguistic theory is a component of the individual head. If some people use this component for talking to one another, so what? One of his clinching arguments is that you can use your hairstyle to make a point – but that doesn't make communication intrinsically the function of hair.

As I have stressed already, little is to be gained from trying to make sense of such pronouncements. The technical literature is so obscure that angels dancing on pins come to mind. My view is that we must know how to tell science from scientism. Chomsky invokes science as a vertical source of authority, without submitting to the collectivism and accountability of genuinely self-organised science.

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