



18:08:201004:05:2009

Weekly Worker 657 Thursday January 25 2007 ■ [Subscribe](#) to the *Weekly Worker*

Chomsky's parallel lives

[home](#) ■[contact](#) ■[action](#) ■[weekly worker](#) ■[respect the unity coalition](#) ■[european social forum](#) ■[theory](#) ■[resources](#) ■[what we fight for](#) ■[programme](#) ■[join](#) ■[search](#) ■[communist university](#) ■[links](#) ■[our history](#) ■

Chris Knight of the Radical Anthropology Group concludes his examination of a political enigma

If science is to remain true, insists Noam Chomsky, it needs a protected space, free of all political pressure. Its purposes are not those of human beings: science operates on another level. Science cannot give meaning to human experience; it cannot teach us how to live. Unlike religion or literature, this form of knowledge simply bypasses human concerns.

Chomsky asserts: "If someone can come up with a non-trivial theory that has some bearing on matters of human concern, with conclusions of any credibility that would alter the ways in which I or others view these matters without access to the 'theory', I'd be the first to immerse myself in it, with delight ... Many people in the academic and political left complain about my 'non-theoretical' stance, as do those elsewhere. But so far no-one has even tried to respond to this very simple challenge that any sane person would make, as far as I can see. What am I to conclude from that?"¹

Scientific socialism, as Chomsky is well aware, makes precisely the claim that science is politically revolutionary - that it does have human social meaning. However, he believes Marxism to have spectacularly failed. The quest for authoritarian control is the *raison d'être* of ideologists who continue to invoke the name of Marx. Since deception is part of these people's whole agenda, it is no accident that academic Marxist theory these days is so convoluted, jargon-ridden and evasive. Referring to the current political situation, Chomsky comments: "There's nothing terribly profound here, as far as I know. If there is, nobody has discovered it. We ought to be able to talk about these things in simple, straightforward words and sentences without evasion and without going to some expert to try to make it look complicated ..." ²

However, Chomsky hastens to add, the requirement to talk in "simple, straightforward words" should not be applied to current work in linguistics, which is "a totally different thing".³ Unlike political analysis, scientific linguistics is unavoidably complicated and difficult for ordinary people to understand. Linguists are no different from physicists in this respect. Like scientists in any discipline, they have the right to exclude from

Fighting fund Ascending

Last week I was hoping against hope that I would be able to report a "surge in contributions" to help us not only meet, but exceed, our £500 fighting fund target for January. We have, unfortunately, incurred a good deal of extra cost (not to mention huge inconvenience) as a result of moving our office and print facility.

Well, I am pleased to say that my heartfelt plea has produced a healthy response - 14 separate donations, amounting to £280 in one week! We have £420 and I am now sure we will break the £500 barrier, but the question is, how far can we go past it in the remaining week? To tell you the truth, we could do with doubling our usual receipts this month.

In the meantime let me thank - in ascending order - comrades HF, LV, BD, PG, AG and AT, who all donated £5 (haven't I always said those small donations can mount up?). My thanks also go to DM and GF (£10 each), and DI and RD, who sent in £20, not to mention that regular and reliable donor, MM, who stumped up an extra £40 when ordering Jack Conrad's new book.

But pride of place goes to TR, PL and MC, who each contributed a tremendous £50 - comrades, you have done us proud. (MC was

their debates anyone who has not mastered the specialist field.⁴

Chomsky, then, expresses himself in two quite different languages - one activist and avowedly transparent, the other scientific and correspondingly opaque. Quite clearly, the gulf between these different speaking styles reflects the fact that he must operate in two utterly different camps. As one sympathetic biographer explains, "If the importance of Chomsky's formal linguistic work is acknowledged ... by a group of scientists, his political commentaries get a good reception from a very different audience. His political works and speeches are typically not welcomed by those in positions of authority and power ... But they get a surprisingly warm reception from much of their intended audience - workers, unionists, students and so on."⁵

Chomsky makes no secret of the tensions produced in him by such a double life: "Now exactly how one can maintain that sort of schizophrenic existence I am not sure; it is very difficult."⁶ Let us take an example. In 1965, as Chomsky reminded an activist audience, the Indonesian Communist Party - "the party of the poor" - was so popular across Indonesia that it stood a reasonable chance of winning a free election. The CIA was not willing to risk that. In a pre-emptive strike, it sponsored a military coup, resulting in what *The Times* called admirably a "staggering mass slaughter" of several million peasants. Chomsky comments: "The CIA pointed out in its report, which has since come out, that the slaughter that took place ranks up with the Nazis and Stalin. They were very proud of it, of course, and said it was one of the most important events of the century."⁷

Now let us turn to an interviewer's query about an old personal friendship. The friend in question was a former provost of the Massachusetts Institute of Technology (MIT). By the time of the 1995 interview, he had quite recently been appointed director of ... the CIA. Chomsky explains to his interviewer: "We were actually friends and got along fine, although we disagreed on about as many things as two human beings can disagree about. I liked him. We got along very well together. He's very honest, very direct. You know where you stand with him ... I was one of the very few people on the faculty, I'm told, who was supporting his candidacy for the president of MIT."⁸ Despite this support, Chomsky's nominee didn't get the job. His problem, Chomsky explains, was "faculty opposition".

Chomsky, then, was not just flitting between opposed political camps. At MIT, he had positioned himself between colliding tectonic plates. He could not conceivably have introduced his future CIA colleague to an audience of revolutionary anarchists. Conversely, it becomes clear why Chomsky is less than enthusiastic when his activist supporters strive to connect up with his technical work at MIT:

"If there is a connection," he cautions, "it is on a rather abstract level. I don't have access to any unusual methods of analysis, and what special knowledge I have concerning language has no immediate bearing on social and political issues ... There is no very direct connection between my political activities, writing and others, and the work bearing on language structure ..."⁹

Chomsky's need to keep his two audiences apart may in fact help explain his repeated insistence that linguistic science must remain insulated from political activism, while such activism reciprocally must keep clear of science. As he puts it, "the search for theoretical understanding pursues its own paths, leading to a completely different picture of the world, which neither vindicates nor eliminates our ordinary ways of talking and thinking."¹⁰ Under the circumstances, it is hard to see how he could say anything else.

The myth of social science

How could a leftwing activist get away with a position so diametrically opposed to that of Marx? Chomsky's solution was to portray the whole of social science - premised on the

one of 20,032 online readers last week - we have not dipped below 20,000 for a long time).

Now is it too much to ask for that "surge" to continue - increase even - for another week?

Robbie Rix

■ [Click here](#) to download a standing order form - regular income is particular important in order to plan ahead. Even £5/month can help!

■ Send cheques, payable to *Weekly Worker*, BCM Box 928, London WC1N 3XX

■ Donate online:

[Make A Donation](#)

idea that human nature does not exist - as so worthless and reactionary as to be beyond the pale. Social scientists, according to Chomsky, say things so nonsensical that the only way to explain them is to assume that the perpetrators are power-hungry manipulators. In his view, children become subject to these manipulators from the moment they first attend school.

Writing of school education of the kind typical in the United States, Chomsky terms it “a period of regimentation and control, part of which involves direct indoctrination, providing a system of false beliefs”.¹¹ Other components of the system have the same basic function: “Over 60 years ago, Walter Lippmann discussed the concept of ‘the manufacture of consent’, an art that is ‘capable of great refinements’ and that may lead to a ‘revolution’ in ‘the practice of democracy’. The idea was taken up with much enthusiasm in business circles - it is a main preoccupation of the public relations industry, whose leading figure ... described the engineering of consent as the very essence of democracy.”¹²

Chomsky notes that from the turn of the century until the present day, manipulation of public opinion was the object of an ideological industry both unrelenting and diverse, ranging from schools to the mass media and beyond. As an AT&T vice-president explained in 1909, “the public mind ... is in my judgment the only serious danger confronting the company”.

This idea, continues Chomsky, “was also taken up with vigour in the social sciences. The leading political scientist, Harold Lasswell, wrote in 1933 that we must avoid ‘democratic dogmatisms’, such as the belief that people are ‘the best judges of their own interests’. Democracy permits the voice of the people to be heard, and it is the task of the intellectual to ensure that this voice endorses what far-sighted leaders know to be the right course. Propaganda is to democracy what violence is to totalitarianism. The techniques have been honed to a high art, far beyond anything that Orwell dreamt of. The device of feigned dissent, incorporating the doctrines of the state religion and eliminating rational critical discussion, is one of the more subtle means, though more crude techniques are also widely used and are highly effective in protecting us from seeing what we observe, from knowledge and understanding of the world in which we live.”¹³

For Chomsky, only the natural sciences are free of such political contamination. Chomsky disagrees passionately with those social theorists - including historians of science - for whom science itself is just another form of oppressive ideology. He admits that such suspicions have long found favour among his fellow anarchists: “Within the anarchist tradition, there’s been a certain feeling that there’s something regimented or oppressive about science itself, that we should break free of the oppressive structures of scientific thinking, and so on. I’m totally out of sympathy with that attitude. There are no arguments that I know of for irrationality. I don’t think the methods of science amount to anything more than being reasonable, and I don’t see why anarchists shouldn’t be reasonable.”¹⁴

With the rise of postmodernism, Chomsky complains, science has become viewed as just another form of manipulative ideology. Whereas in the 1930s, he notes, progressive intellectuals were still running education classes for ‘the workers’ and writing books with titles such as *Mathematics for the millions*, everything has now gone into reverse: “Today’s counterparts of these 30s left intellectuals are telling people, ‘You don’t have to know anything. It’s all junk, a power play, a white male conspiracy. Forget about rationality and science.’ In other words, put those tools in the hands of your enemies. Let them monopolise everything that works and makes sense.”¹⁵

Chomsky passionately opposes the idea that ordinary people need not learn anything but can think what they like. So, instead of urging us to “break free of the oppressive structures of scientific thinking”, he recommends respecting and upholding precisely those structures. For Chomsky, indeed, there is no other road to freedom. The compatibility between anarchist politics and science is proven by numerous precedents, including the work of Pyotr Kropotkin, whose great book, *Mutual aid* - a celebration of self-organisation in nature - was “perhaps the first major contribution to ‘socio-biology’”.¹⁶

Chomsky cautions, however, that there is one problem. While anyone can be an activist, this does not apply necessarily to science: “As part of the human biological endowment, the scientist is endowed with a certain conceptual apparatus, certain ways of formulating problems, a concept of intelligibility and explanation, and so on. Call this the science-forming capacity ... we may assume it to be fixed, in the manner of the language faculty.”¹⁷

So the science-forming capacity is a genetically fixed feature of scientists. However, not everything is fixed. Just as the language faculty needs an external environment to set its parameters to, say, 'French' rather than 'Swahili', so the science-forming faculty must be supplemented with "certain background assumptions", these being determined by "the state of current scientific understanding". "So supplemented," Chomsky continues, "the science-forming capacity addresses a query posed in terms accessible to it, or it formulates a query using its own resources - not at all a trivial task; the science-forming capacity then seeks to construct a theoretical explanation that will respond to this query. Its own internal criteria will determine whether the task has been successfully accomplished. If it is, the background assumptions may change, and the science-forming capacity is now prepared to face other queries, perhaps to formulate others that it will itself proceed to address"¹⁸

The language faculty belongs to everyone by birthright. Does this also apply to the science-forming faculty? Unfortunately, this is not the case. Not everyone is equipped by nature to do science: "For problem solving and theory construction there is nothing so specific. The problems we face are too varied, and the differences among people who face them are far more striking, though it is worth emphasising that those who share the same background assumptions can generally understand a proposed theory and evaluate it, even if they did not construct it themselves and perhaps lacked whatever special abilities are involved in doing so."¹⁹

The science-forming faculty operates autonomously within the individual scientist, in this respect just like its linguistic counterpart. Social engagement is not required: the faculty works all by itself. However, according to Chomsky, its output may lead indirectly to important social benefits - such as truthfulness and honesty in academic life. Chomsky concedes that manipulative ideology may sometimes distort even the work of a genuine natural scientist. But at least "the sciences do instill habits of honesty, creativity and cooperation", features considered "dangerous from the point of view of society".²⁰ A student in a university physics department will hardly survive without being questioning; in the "ideological disciplines", by contrast, originality is discouraged. Chomsky complains that in the "domain of social criticism the normal attitudes of the scientist are feared and deplored as a form of subversion or as dangerous radicalism".²¹ For Chomsky, the culture of science is the real "counter-culture" to the reigning ideology.²²

In recent decades, historians of science have clarified the social and political processes through which research agendas are set and 'facts' correspondingly selected and constructed.²³ For many anthropologists, the concept of a monolithic, unitary knowledge-form known as 'science' has yielded to a more pluralistic vision of multiple 'sciences' fashioned for diverse social purposes. The mythic constructions of western 'science', it is widely argued, prevail over indigenous alternatives because their supporters can lay claim to disproportionate levels of economic and military power.²⁴

Chomsky does not hold this view. Since Copernicus and Galileo, we have known that the earth is round and that it encircles the sun - facts which remain true regardless of anyone's tribal or religious beliefs to the contrary. For Chomsky, political pluralism does not license unqualified persons to intrude as they please into scientific debates. Those who have not mastered the relevant literature - internalising its concepts and terms - have nothing of interest to contribute and should therefore expect to be excluded:

"Look, in the physical sciences there's by now a history of success, there's an accumulated record of achievement which simply is an intrinsic part of the field. You don't even have any right to enter the discussion unless you've mastered that ... you have to at least understand it and understand why the theories have developed the way they have and what they're based on and so on. Otherwise, you're just not part of the discussion, and that's quite right."²⁵

Not part of the discussion

This brings us to the nub of the matter. According to Chomsky, the so-called 'social sciences' amount only to political ideology, a defect extending naturally to sociologically conceived versions of linguistics. Consequently, it is right to exclude such perspectives from discussion. Those who fail to understand this clearly have not mastered certain foundational concepts intrinsic to the field. For Chomsky, 'society' is not a valid scientific

concept. No natural language should be conceptualised as belonging to a social group. Neither should we imagine that in acquiring linguistic competence, children need social relationships - science cannot say anything about such phenomena. 'Mind' has no necessary connection with 'society'. To study mental phenomena is to examine aspects of brain structure and function.

Ignoring the 'so-called' social sciences, Chomsky's dream is to unify the sciences by integrating linguistics into an expanded version of physics: "The world has many aspects: mechanical, chemical, optical, electrical and so on. Among these are its mental aspects. The thesis is that all should be studied in the same way, whether we are considering the motion of the planets, fields of force, structural formulas for complex molecules or computational properties of the language faculty."²⁶

Consistently with this project, Chomsky defines language as "an individual phenomenon, a system represented in the mind/brain of a particular individual",²⁷ contrasting this with the earlier view of language as "a social phenomenon, a shared property of a community". The great Swiss linguist, Ferdinand de Saussure, famously distinguished between *langue* (language) and *parole* (speaking). *Langue* is language in its role as a stable, collectively agreed system. In Saussure's words: "It is the social side of speech, outside the individual who can never create nor modify it by himself; it exists only by virtue of a sort of contract signed by the members of a community."²⁸

The problem with such usage, Chomsky complains, is that it "involves obscure socio-political and normative factors"²⁹ - about which science can have nothing to say. He denies the relevance of social factors, even when considering language acquisition by the human child. The infant's linguistic capacities, he insists, cannot be taught. Instead, they must be "allowed to function in the way in which they are designed to develop".³⁰

After briefly discussing this topic, he concludes: "I emphasised biological facts, and I didn't say anything about historical and social facts. And I am going to say nothing about these elements in language acquisition. The reason is that I think they are relatively unimportant"³¹

Superficial irrelevancies aside, Chomsky views language acquisition as independent of experience: "No-one would take seriously a proposal that the human organism learns through experience to have arms rather than wings, or that the basic structure of particular organs results from accidental experience. Rather it is taken for granted that the physical structure of the organism is genetically determined ..."³²

Human mental structures develop in the same way: "Acquisition of language," concludes Chomsky, "is something that happens to you: it's not something that you do. Learning language is something like undergoing puberty. You don't learn to do it; you don't do it because you see other people doing it; you are just designed to do it at a certain time."³³

Since language is not social, it follows logically that its function cannot be social communication. Language, Chomsky has recently asserted, "is not properly regarded as a system of communication. It is a system for expressing thought, something quite different. It can, of course, be used for communication, as can anything people do - manner of walking or style of clothes or hair, for example. But in any useful sense of the term, communication is not the function of language, and may even be of no unique significance for understanding the functions and nature of language."³⁴

Chomsky in political perspective

Let us retrace our steps. Consider Chomsky, the young anarchist, faced with the problem of breaking into academia. Given his outspoken views, how was he to overcome the many obstacles that would naturally be placed in his way?

It would appear that Chomsky found a way of turning his apparent political handicap into an advantage. Financially and institutionally, the requirement, he knew, was for an agenda the precise reverse of anarcho-syndicalism. The 1950s represented the dawn of the new computer age. Key intellectual and technical developments were being funded by the American military. These and other corporate forces required a new version of cognitive and linguistic science, having little in common with what they saw as Marxist-inspired versions of sociology or anthropology. What was needed was a psychology and a

linguistics completely stripped of social content or political awareness - a version of these disciplines rigorously re-engineered and fine-tuned to serve the computer age in the name of 'cognitive revolution'.

But how could the left's 'natural' ascendancy in these disciplines be overturned? Corporate America needed someone of intellectual integrity and - preferably - of unimpeachable political integrity to act as its standard-bearer in organising the necessary coup. Ideally, this person should not only be 'leftwing' in an ordinary, run-of-the-mill sense. The perfect candidate would be sufficiently leftwing to outflank everyone else in the race. Chomsky in 1957 was the right person arriving in the right position at exactly the right time.

In the event, Chomsky forged an anti-behaviourist coalition, linking much of the academic left with those corporate forces - including the military - who were underwriting the development of the nascent computer industry. It was an unholy alliance, and as such was destined to fall apart once the behaviourist enemy had been overthrown.

Jerome Bruner recalls: "Now let me tell you first what I and my friends thought the revolution was about back there in the late 1950s. It was, we thought, an all-out effort to establish meaning as the central concept in psychology - not stimuli and responses, not overtly observable behaviour, not biological drives and their transformation, but meaning ... we were not out to 'reform' behaviourism, but to replace it." Bruner continues: "The cognitive revolution as originally conceived virtually required that psychology join forces with anthropology and linguistics, philosophy and history, even with the discipline of law."³⁵

Once behaviourism had been toppled, however, Chomsky clarified that this was not his vision at all. As Bruner explains, "Very early on ... emphasis began shifting from 'meaning' to 'information', from the construction of meaning to the processing of information. These are profoundly different matters. The key factor in the shift was the introduction of computation as the ruling metaphor and of computability as a necessary criterion of a good theoretical model."³⁶

'Information', as Bruner points out, is a term designed to be indifferent with respect to meaning. In computational terms, information comprises an already pre-coded message in the system. Meaning is pre-assigned to messages. It is not an outcome of computation nor is it relevant to computation save in the arbitrary sense of assignment: "According to classic information theory, a message is informative if it reduces alternative choices. This implies a code of established possible choices. The categories of possibility and the instances they comprise are processed according to the 'syntax' of the system, its possible moves. Insofar as information in this dispensation can deal with meaning, it is in the dictionary sense only: accessing stored lexical information according to a coded address."³⁷

In integrating his new version of linguistics with computer science, Chomsky dispensed with concepts such as 'intention', 'context' and 'meaning' in favour of an insistent and relentless focus on 'syntax'. It was Alan Turing's great discovery that machines can be designed to evaluate any inference that is 'formally valid' - that is, valid by virtue of the internal syntax of the pre-installed code. No machine can genuinely talk, because speaking entails understanding what other speakers may have in mind, as they draw on their memories and experiences of themselves and others on the biological, social, cultural, religious and other levels inhabited by human minds. Machines are and always will be hopeless at passing themselves off as humans.

But, as Fodor points out, "you can build them so that they are quite good at detecting and responding to syntactic properties and relations. That, in turn, is because the syntax of a sentence reduces to the identity and arrangement of its elementary parts, and, at least in the artificial languages that machines compute in, these elementary parts and arrangements can be exhaustively itemised and the machine specifically designed to detect them."³⁸

Such a system, however, cannot cope with vagueness, with polysemy or with metaphoric or connotative connections - in other words, with the stuff of human language. Consequently, Chomsky and his followers simply stopped talking of meaning - replacing the idea with 'computability' instead. Linguists now spoke not of intention, belief or agency, but of mechanical 'inputs' and 'outputs' - notions not too different, as Bruner points out, from the 'stimuli' and 'responses' of the behaviourists, who were supposed to have been overthrown.³⁹

Writing of Chomsky's overall scientific contribution, Geoffrey Leech comments: "It has the advantage of maintaining the integrity of linguistics, as within a walled city, away from the contaminating influences of use and context. But many have grave doubts about the narrowness of this paradigm's definition of language, and about the high degree of abstraction and idealisation of data which it requires."⁴⁰

While the overthrow of behaviourism was widely celebrated, the 'revolution' intended by Chomsky's corporate sponsors had nothing to do with the establishment of a science of human meaning. As these forces championed Chomsky in steering the 'cognitive revolution' along channels narrowly defined by their specific commercial and political goals, the intellectuals who had supported generativism 'from the left' felt betrayed. Had they been able to unite, they might have comprised a formidable intellectual and political force.

In the event, however, Chomsky's politics served him and his sponsors well. Leftwing resistance to Chomsky's science was always tempered by respect for his moral and political integrity. How do you attack an 'enemy' who is on your own side? The ambivalence ended up simply paralysing the opposition, whose splits and disagreements left Chomsky with a free hand - which he used quite mercilessly.

It is fair to say that most of those linguists and other creative thinkers whose contributions were excluded by Chomsky had political sympathies not vastly different from his own. Together, they could have mounted an impressive intellectual defence of the unity and autonomy of science. In the event, it was Chomsky's defection that sealed their fate. Alienated from the academic mainstream, this talented individual was in effect selected by corporate America to perform an extraordinary double act - playing the role of chief enforcer for the new corporate science at home, while using this very status to gain a hearing as the most eloquent academic critic of US policies elsewhere across the globe.

Notes

1. N Chomsky, letter to RF Barsky, March 31 1995, quoted in RF Barsky *Noam Chomsky: a life of dissent* Cambridge, Mass 1997, p212.
2. N Chomsky *Class warfare* (interviews with David Barsamian), London 1996, p128.
3. *Ibid* p26.
4. Interview in J Peck (ed) *The Chomsky reader* London 1988, p16.
5. J McGilvray *Chomsky: language, mind and politics* Cambridge 1999, p13.
6. CP Otero (ed) *Language and politics* Montreal 1988, pp98-99.
7. N Chomsky *Class warfare* (interviews with David Barsamian), London 1996, pp37-38.
8. *Ibid* p101.
9. N Chomsky *Language and responsibility* (interviews with Mitsou Ronat), New York 1979, p3.
10. N Chomsky, 'Language and nature' *Mind* 104(413), 1995, pp1-61, 8.
11. CP Otero (ed) *Language and politics* Montreal 1988, p6.
12. N Chomsky, 'The manufacture of consent', in J Peck (ed) *The Chomsky reader* London 1988, p136.
13. *Ibid*.
- 14 Interview in J Peck (ed) *The Chomsky reader* London 1988, p22.
15. N Chomsky, 'Language development, human intelligence and social organisation', in J Peck (ed) *The Chomsky reader* London 1988, p128.
16. Interview in J Peck (ed) *The Chomsky reader* London 1988, p21.

17. N Chomsky *Language and problems of knowledge* Cambridge, Mass 1988, p156.
18. *Ibid.*
19. *Ibid.*
20. B Tonkin, 'Making a difference' *City Limits* January-February 1989; quoted in M Rai *Chomsky's politics* London 1995, pp137-38.
21. N Chomsky, 'Towards a humanistic conception of education', in W Feinberg and H Rosemount (eds) *Work, technology and education: dissenting essays in the intellectual foundations of American education* Chicago 1975, p219.
22. M Rai *Chomsky's politics* London 1995, p138.
23. T Kuhn, 'The structure of scientific revolutions' *International Encyclopaedia of Unified Science* Vol 2, Chicago 1970; B Latour and S Woolgar *Laboratory life: the social construction of scientific facts* London 1979; D Haraway *Primate visions: gender, race and nature in the world of modern science* New York 1989.
24. D Haraway *Primate visions: gender, race and nature in the world of modern science* New York 1989; L Nader (ed) *Naked science: anthropological inquiry into boundaries, power and knowledge* London 1996.
25. Interview in J Peck (ed) *The Chomsky reader* London 1988, p16.
26. N Chomsky *Powers and prospects: reflections on human nature and the social order* London 1996, p31.
27. N Chomsky *Language and problems of knowledge* Cambridge, Mass 1988, pp36-37.
28. F de Saussure *Course in general linguistics* London 1974, p14.
29. N Chomsky *Language and problems of knowledge* Cambridge, Mass 1988, p37.
30. *Ibid* p173.
31. *Ibid.*
32. N Chomsky *Reflections on language* London 1976, pp9-10.
33. N Chomsky *Language and problems of knowledge* Cambridge, Mass 1988, p174.
34. N Chomsky *On nature and language* Cambridge 2002, p76.
35. J Bruner *Acts of meaning* Cambridge, Mass 1990, pp2-3.
36. *Ibid* p40.
37. *Ibid* p4.
38. J Fodor *The mind doesn't work that way: the scope and limits of computational psychology* Cambridge, Mass 2000, p13.
39. J Bruner *Acts of meaning* Cambridge, Mass 1990, p7.
40. G Leech *Principles of pragmatics* London 1983, p3.

Read on:

- [Science](#)
- [Weekly Worker archive](#)

 [Print this page](#)

 **Comment on this article**

First Name

Last name

Your email address

Comments