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Review of Vyvyan Evans, *The Crucible of Language: How Language and Mind Create Meaning*. Cambridge University Press, xvii + 359 pp., 2015

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From time to time I am asked whether I plan to produce a new edition of my 1980 book *Schools of Linguistics*, which was quite well received in its day but by now is very out of date. I explain that I am not qualified to do so: I do not know enough about what has happened in linguistics recently, having moved into teaching computer science twenty-five years ago. The question arose again during a recent visit to the linguists of a distinguished Central European university, and I said “For instance, nowadays there seems to be a well-established approach called Cognitive Linguistics, and I really do not understand it”. Rather to my surprise, the immediate response was “You’re not the only one”. Apparently Cognitive Linguistics is a school which has succeeded in winning the loyalty of a sizeable number of converts, but which remains something of a mystery to many of us outside it.

For those like myself who would like to grasp the point of Cognitive Linguistics, Vyvyan Evans ought to be an ideal guide. For years he was a Professor of Cognitive Linguistics (Evans must be one of very few individuals to have had the phrase included in his formal job title – though since changing universities in 2008 he is now simply Professor of Linguistics). He is co-editor of *Language and Cognition*, the journal of the UK Cognitive Linguistics Association. And he prides himself on writing in a non-technical style well judged to appeal to newcomers to his field.

Evans made a splash with his 2014 book *The Language Myth*, the central message of which was that language is not a genetically-fixed instinct, as Noam Chomsky, Steven Pinker, and their generative school would have us believe. He is certainly right there, and I have argued essentially the same point of view at length myself (Sampson 2005, 2016). (I notice, though, that Evans’s book has been criticized for condemning generative theories without demonstrating understanding of them (Toolan 2015: 473). I have always taken for granted that in order to refute Chomsky and Pinker it is necessary to take their ideas seriously, and to offer evidence and argument to show why those ideas are mistaken.) *The Language Myth* was an essentially negative book; now, in *The Crucible of Language*, Evans offers his positive account of how human language really works as a “cognitive” system.

In itself the word “cognitive” tells us little – who could deny that language is an aspect of cognition? As the new book develops, it appears that a more distinctive feature of Evans’s school has to do with what he calls “embodiment”. A leading idea for

Cognitive Linguistics, evidently, is that the ways in which we talk about abstract relationships of various kinds are derivative from turns of phrase referring to concrete spatial relationships – we interpret abstractions in terms of our bodily situation in the world. Evans draws attention, for instance (p. 22), to the spatial metaphors in:

Christmas is *fast approaching*. The price of shares has *gone up*. Those two have a very *close* friendship.

As his book continues, Evans reverts frequently to examples like these, and I have encountered similar examples assigned a central place in writings by other cognitive linguists. Members of this school seem to see “embodiment” as a crucial key to understanding how language works.

Clearly there is a lot of this sort of thing in English, and perhaps in other European languages; and that is not surprising. As languages, and the intellectual outlook of their speakers, co-evolve, it seems almost inevitable that concrete ideas would be encoded first, and it seems natural enough that words for them might often be re-purposed when a need arises to express more abstract ideas. Even for English, though, I am not sure that this is anything more than a fact about the past etymology of such usages. Whoever first talked, in some ancestor-language of modern English, about a festival “approaching” perhaps did think of himself as standing still while the occasion moved physically towards him – but I doubt that is true today, just as I doubt whether people who talk today about “embarking” on a project picture themselves as walking up the gangplank of a ship. These are just conventional ways of expressing abstract ideas.

What is more, if this idea that “human concepts are embodied” were as significant for our understanding of language and mind as the cognitive linguists believe, would one not expect comparable turns of phrase to be similarly salient in languages all over the world? Evans writes (*ibid.*) that his examples “point to something fundamental about the way we *all* think” (his italics). The non-European language with which I am most familiar is Chinese, and impressionistically it seems to me that spatial metaphors referring to non-spatial abstractions are strikingly less frequent in that language than in English, though they are not entirely absent. It would be a large undertaking to establish this difference reliably, but just looking at Evans’s examples: English “approach” in “Christmas fast approaches”, with its derivation from *proche*, ‘near’, clearly has a basically spatial sense, but Chinese would just say *kuài dào*, ‘quickly arrive’, which feels relatively neutral between space and time. For a price to go up is *zhǎng*, which etymologically refers to the flood tide; in English we say that the tide “comes in” or “rises”, but the Chinese word includes no such explicit spatial reference. “Close friend” translates as *qīn yǒu*, ‘intimate/affectionate friend’. Or to take another example which Evans makes much of a few pages later, the best my English–Chinese dictionary can do for “to be *in* love with” is *àizhe*, the verb ‘love’ with the continuative

suffix. This contrast between more figurative and more literal turns of phrase runs through the respective languages more generally, I believe. But if concepts are spatially “embodied” much more in some languages than in others, can that “embodiment” really be a central key to the workings of the mind?

Not that Evans seems very interested in the panoply of diverse languages as an index to the range of possibilities open to the human mind. On p. 13 he discusses Jerry Fodor’s 1975 book *The Language of Thought*, which claimed that all the languages of the world comprise alternative encodings of the same universal set of fundamental concepts. Evans sees this idea as “brilliant” (though he ultimately disagrees with it). To me, Fodor’s thesis was absurd, one that could be taken seriously only by people with little knowledge of languages other than their own. And one telling pointer to that absurdity was that Fodor’s 200-page book, though it claimed to be about language universals, only once mentioned a piece of any language other than English: halfway through the book he cited the French word for ‘dog’ ... and got it wrong, spelling it *le chein*. Almost unbelievably, Evans while discussing Fodor makes an independent but precisely equivalent error. Evans offers the German for ‘cat’, and he spells it *Kätze*. The German for ‘cat’ is *Katze*, without umlaut. (The pronunciations are quite different. If *Kätze* were a word, it would sound to a German more like ‘heretic’ – *Ketzer* – than like ‘cat’.)

Little misprints creep in to the most responsible scholarly writing, of course, and in themselves they are fairly trivial (though adding a foreign diacritic to a word which has none is an odd kind of “misprint”). But these errors point towards a much more serious problem. Fodor, and Evans, write about language as a general human phenomenon while recognizing no need to think seriously about whether their guesses based on their own native language have general validity, or not. It is understood that “language” essentially means English; references to any other languages are hasty optional extras. Fodor, and Evans, are intellectually reckless. And in this respect they are all too typical of a large number of present-day linguistics theorists.

Another kind of intellectual recklessness consists of ignoring the work of one’s predecessors, and this folly too is widespread within the discipline of linguistics. Even more telling than Evans’s mistake about *Katze* is a passage on the same page where he describes Jerry Fodor’s 1975 book as “[a]n early proposal” about how meaning in language works. The implication of “early” is that people were not thinking seriously about the semantic aspect of human language much before 1975. Linguists sometimes write as if the topic were virtually inaugurated by Jerrold Katz and Jerry Fodor’s 1963 article “The structure of a semantic theory”, and if that were so then 1975 could still be seen as early days. But of course it was not so. What about Book III of John Locke’s *Essay Concerning Human Understanding*, for instance, published in 1690? Closer to the present, but still well before the 1960s, what about the discussions by Willard Quine, Ludwig Wittgenstein, and a number of others about the crucial issue of the

analytic/synthetic distinction? Hilary Putnam's discussion of the division of labour within a speech-community with respect to maintenance of the semantic structure of its language came after the Katz and Fodor article, but even Putnam's discussion preceded Fodor's *Language of Thought*.

The only possible reason for describing Fodor's book as "early" would be that modern universities are divided into departments, and the writings I mentioned are usually studied in departments of philosophy, rather than departments of linguistics. But these administrative boundaries are entirely artificial. The philosophers have been treating the same subject which the linguists have begun trying to treat, although the linguists rarely read the philosophers. And, because the linguists have largely ignored those who came before them, they misunderstand the subject in a way that philosophers of language do not. People who discuss meaning from within departments of linguistics persistently assume that the task of defining the semantics of a language is about specifying how examples of the language can be translated into entities of some kind that are not part of the language. Katz and Fodor discussed translating English words and sentences into things called "semantic markers" and "distinguishers". Vyvyan Evans, in common with many other linguists, writes about linking words and other linguistic forms to "concepts". Yet it is never made clear why a set of "markers" or "concepts" would tell us more about the meaning of a language example than the example itself tells us.

In reality, the bulk of the job of defining semantics is not about relating bits of language to anything outside language: it is about language-internal relationships. Defining the semantics of English would largely consist of specifying how English-speakers are apt to infer particular English statements as implications of other statements. At the edges of the web of inferential relationships there are observation statements, which relate directly to sense-data; but most sentences, in English or any other human language, relate only very indirectly to sense-data, while any declarative sentence is directly linked to other sentences which can be inferred from it or from which it can be inferred.

I said that specifying these inferential relationships is what a definition of language semantics "would" comprise, but I put it in the conditional because, if philosophers like Quine and Wittgenstein are right to deny the existence of a definite analytic/synthetic distinction, the task is impossible in principle. Evans writes (p. 11) that "for much of the twentieth century the scientific study of language swept the study of meaning under the carpet – out of sight is out of mind", as though linguists of that period were behaving like lazy housemaids. But leaving semantics out of scientific linguistics is probably the right thing to do. The semantics of a human language is not a topic that can be the subject of a successful scientific theory.

These are issues that philosophers have been thinking about intensively for decades and centuries, but most present-day linguists appear blithely unaware of that body of

discourse. Evans does use Wittgenstein quotations as epigraphs introducing some of the sections of his book, but they seem to be included chiefly for cosmetic purposes; Wittgenstein, Quine, and Putnam are never discussed in the body of the book. (Locke is fleetingly mentioned once, because his name appears in a quotation from another book by Jerry Fodor.)

The effect of this blindness to intellectual history on the part of the discipline of linguistics is rather as if a group of present-day academics were to set themselves up as, say, “thingologists”, and announce that they had discovered deep truths about the nature of physical things, which when stated explicitly turned out to amount to naive and amateurish ideas, perhaps akin to the mediaeval doctrine that different materials reflect different mixtures of earth, air, fire, and water. Provided the thingologists were able to convince university managers that they could attract students, they might succeed in establishing university Departments of Thingology, and busy themselves with training undergraduates to qualify for thingology degrees and with assessing one another’s thingological research proposals. If anyone mentioned atoms, molecules, or valency bonds, they would say “Oh, that’s chemistry – we don’t bother with that stuff round here. If you want to know about things, obviously you need to ask thingologists.” Faced with confident ranks of tenured Professors of Thingology, what laymen would dare to prick the bubble?

So far as insights about the actual workings of English or other languages are concerned, once Cognitive Linguistics has offered its ideas about “embodiment” it seems to have shot its bolt. I find no other novel theory or descriptive apparatus in Evans’s book (and I have dealt adequately with “embodiment” above). But Evans does put a great deal of effort into making the distinctive cognitive-linguistic view of human language appear to be more than a vague waving of hands, via repeated claims that new psychological and neurological research demonstrates its correctness. On p. 27 he writes:

Over the past couple of decades, a revolution has taken place in our understanding of the way in which language and the mind co-conspire to create meaning. Scientists now know that language reflects key features of mind design.

Parts of the book are studded with references to recent scientific research findings. This literature is not familiar to me, and I cannot claim to have followed up most of these citations. When I did try doing so, I seemed to find a large gap between what the scientists actually say and the grandiose statements which Evans claims to base on their findings. On p. 227 Evans writes that:

The psychologist Lawrence Barsalou has suggested that the function of language is to provide an executive control function, operating over body-based concepts in the conceptual system. And this view seems to be on the

right lines.

The first source cited in a footnote is Barsalou (2005), though there are also references to a book-chapter co-authored by Barsalou, and to Evans's own 2014 book (without a specific page reference). Evans's allusion to "body-based concepts" clearly chimes with the "embodiment" idea, but can anyone really have argued that "executive control" is the entire function of human language? That sounds as naive as B.F. Skinner's account of language as portrayed and criticized by Chomsky (1959). I read Barsalou (2005) to check. It is a fairly slight piece of less than three pages, the content of which does not sound strikingly original to me, and I certainly cannot see that Barsalou offers anything in it to justify Evans's alleged summary. Barsalou tells us that human cognition seems to differ from that of other species, with non-human cognitive systems perhaps serving mainly to process "current situations" and thus motivate behavioural responses to them, while human language may control "the simulation system as it represents non-present situations", linked indirectly, if at all, to executive control of behaviour. I find nothing at all in Barsalou's article that connects human language to "body-based concepts".

If this is a fair sample of the relationship between the scientific literature cited by Evans, and his own ideas, then the suspicion must arise that these literature citations serve mainly to create an impression that Evans is writing with a science-based authority which, in reality, he lacks. Television commercials for women's cosmetics and hair-care products standardly include a "science bit", a reference to some exotic chemical, or some obscure aspect of the microstructure of skin or hair, which not one viewer in thousands will understand, but which creates a favourable atmosphere for reception of the selling message in the rest of the commercial. Citations of Barsalou and others seem to be Evans's "science bits" – but, proportionately, they occupy much more of the book than one finds in a Laboratoires Garnier advert.

In some cases Evans's usurpation of spurious authority seems blatant. On p. 67 he displays an ambiguous Figure which can be seen either as two faces looking at each other, or as a vase with an ornate stem. His source credit runs "after Tyler and Evans 2003". The word "after" in such a context is normally used to acknowledge the originator of a valuable graphic item. But this Figure was not original in a book co-authored by Evans in the last decade; it was invented a hundred years ago by the Danish psychologist Edgar Rubin. (It is well known among psychologists, though doubtless less so among linguists.)

Another scientific domain on which the book draws heavily is palaeontology. A chapter on the origin of language gives us a good deal of information on recent findings about the evolutionary ancestry of our species, together with speculation about which point, in the "family tree" having *Homo sapiens sapiens* at the tip of one of its branches, saw language first arise. I found this material well worth reading: the research area is not one I have kept up with, and it is certainly interesting in its own

right. But it is not clear how it can offer any support to the thesis of Evans's book. What difference could it make, for our understanding of how language functions in modern Man, whether it began among *H. sapiens* some 50,000 years back or among *H. heidelbergensis* perhaps ten times longer ago? The palaeontology material is just another of Evans's "science bits".

Incidentally, apart from the fact that some of the scientific literature cited by Evans seems to have little relevance to his thesis, there are cases where Evans clearly misunderstands the science. He links Mankind's possession of language with a claim that we are unusual in the extent to which members of our species co-operate with one another; for instance, he concludes a discussion of ethology by writing that "In the final analysis, our species is uniquely cooperative in the way that no other species is" (p. 269). Human beings are more co-operative than other apes, the creatures Evans has been discussing in the preceding passage, but it would be hard to argue that we are more co-operative than the so-called eusocial species, including various Hymenoptera, termites, and certain rodents. (Yet eusocial species have no languages.)

Cambridge University Press claims to be the oldest publishing house in the world (Black 1992: 1). Probably most academic presses are intended among other things to contribute towards the financial viability of their parent universities, but, particularly in the case of famous and old-established institutions, we expect their publishing decisions also to be influenced by considerations of intellectual soundness. I have noticed before that, compared with the publishing arms of some other venerable universities, Cambridge University Press appears surprisingly willing to produce books that will sell without seeming to worry too much about the reliability of their content. (For instance, see <[www.grsampson.net/Cithaca.html](http://www.grsampson.net/Cithaca.html)> for a very different field of enquiry which has been distorted by a theory that would never have been taken very seriously, if Cambridge University Press had not chosen to disseminate it via the vehicle of a glossy, beautifully-illustrated coffee-table volume.) The aegis of Cambridge University Press, together with his engaging prose style, will no doubt ensure Vyvyan Evans a wide readership. But his book reassures me with respect to my ignorance of the details of Cognitive Linguistics. There are plenty of other reasons why I would be unequal to the task of updating my *Schools of Linguistics* book, but I have no ambition to compete with Laboratoires Garnier or L'Oréal.

## References

- Barsalou, Lawrence W. 2005. "Continuity of the conceptual system across species", *Trends in Cognitive Sciences* 9.309–11.
- Black, Michael. 1992. *A Short History of Cambridge University Press*. Cambridge: Cambridge University Press.
- Chomsky, Noam. 1959. Review of B.F. Skinner, *Verbal Behavior*, *Language* 35.26–58. Reprinted in Jakobovits and Miron (1967).

- Evans, Vyvyan. 2014. *The Language Myth: Why Language is Not an Instinct*. Cambridge: Cambridge University Press.
- Fodor, Jerry A. 1975. *The Language of Thought*. New York: Thomas Crowell.
- Jakobovits, Leon A., and Murray S. Miron, eds. 1967. *Readings in the Psychology of Language*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Katz, Jerrold J. and Jerry A. Fodor. 1963. "The structure of a semantic theory", *Language* 39.170–210. Reprinted in *The Structure of Language*, ed. by Fodor and Katz, Englewood Cliffs, New Jersey: Prentice-Hall, 1964, and in Jakobovits and Miron (1967).
- Sampson, Geoffrey. 2005. *The "Language Instinct" Debate* (revised edn). London and New York: Continuum.
- Sampson, Geoffrey. 2016. "Rigid strings and flaky snowflakes". To be in *Language and Cognition*. Online at <[www.grsampson.net/ARsy.pdf](http://www.grsampson.net/ARsy.pdf)>.
- Toolan, Michael. 2015. Review of Evans (2014), *Language and Dialogue* 5.471–84.

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Sampson graduated in Oriental Studies at Cambridge in 1965. After graduate studies in linguistics and computing at Yale University (USA), and a fellowship at Queen's College, Oxford, he taught linguistics for the first half of his teaching career, and computing for the second half. Since retiring as a professor of informatics from Sussex University in 2009, he has been a research fellow at the University of South Africa.