

Editorial

ADDICTION

Part of the problem with current debates over the nature of ‘addiction’ is that, despite the fact that much of the debate is carried on by psychologists, underlying assumptions of current psychological theory are rarely discussed. For example, most psychologists even nowadays tend to use the framework of ‘cognitivism’, or (occasionally) behaviourism as an approach to the subject, as though these were the only two possible approaches available. But in the last ten years, new schools of psychology have thrown new light on the increasingly sterile ‘cognitivism’ *versus* ‘behaviourism’ debate. Embodied Cognition (Lakoff and Johnson, 1999; Richardson, 2000) Distributed Cognition (Hutchins, 2000) Situated Cognition (Clancey, 1997), and Discursive Psychology (Edwards and Potter, 1992) have challenged views of language, cognition and behaviour that were once ubiquitous in the field and have led to a revolution in the philosophical foundations of psychology.

It will be argued here that this ‘New Psychology’ has much to offer in terms of throwing new light on old questions. However, to show why this is the case, first we must sketch in the background.

Behaviourism, as is rather well known, was first propounded by Watson in 1914, although it was not until some years later, with the aggressive propagandising of Skinner that the school became the dominant one in American psychology. Despite later demonisation of behaviouristic psychology by writers of the ‘cognitivist’ school, it could be argued that there was nothing terribly unreasonable about their attempt to put psychology on a scientific footing. On the contrary, behaviourism could be seen as an inevitable reaction to the absurdities of the previous orthodoxy of ‘intuitionism’ (which had claimed that ‘self-observing’ one’s own thoughts should be the basic methodology of psychology).

Moreover, behaviourism is best seen, not as a single unified ‘movement’, but as a number of competing methodologies used by a large number of psychologists in a variety of different contexts (therefore, there was no behaviourism: there were *behaviourisms*). Not all behaviourists denied ‘inner states’, and many, far from being 19th century ‘mechanists’, now seem to have been ahead of their time. It was Hebb (1949), for example, who was one of the first proponents of what we would now call ‘neural nets’ or ‘connectionism’. Woodworth (1958) argued in favour of a theory very close to what we would now call ‘situated cognition’. And so on.

However, it was Skinner who, for better or for worse, became the public face of the behaviourisms, and who enunciated what came to be understood as the three basic ‘ground rules’ for the new approach.

1. Denial of the existence of inner ('psychological') states.
2. Stimulus–Response as the basis for the subject's action.
3. The individual as the core unit of analysis (Hayes, 2000).

Of course, it was not quite as simple as all that. In fact, behaviourists vacillated over whether inner states (desires, emotions, memories etc.) actually didn't exist (philosophical behaviourism), or merely that there was nothing that a truly scientific psychology could say about them (methodological behaviourism). Moreover, by the late 'thirties, Skinner was well aware that Stimulus–Response (Cause–Effect) was an inadequate model for explaining all human actions (although no-one denies that it is adequate for explaining *some* human actions), but he was caught by the logic of his own arguments: his only possible solution to this problem seemed to be to posit an 'internal' state of 'willing' or 'wanting'. But of course 'inner states' were what behaviourists had set out to deny, and so Skinner nervously attempted to redefine and broaden the S–R framework without destroying it (Scharff, 1999).

It was the rise of Cognitivism that finally overthrew the 'behaviourists' paradigm. However, it can now be seen, nearly 50 years after Chomsky wrote 'Syntactic Structures' (1956) that if cognitivism was a revolution, it was very much a palace revolution. Cognitivists proclaimed that some inner states were now to be acceptable, but only of a highly specific kind (this is sometimes blurred in discussions of cognitivism: cognitivists like to imply that to believe in any inner states *of any kind at all* commits one to cognitivism, but this is not the case). Cognitivists insisted that inner states were symbols or representations: static, internal, discrete states that were 'operated upon' by algorithmic rules. In other words: the mind is a digital computer (Bechtel and Abrahamson, 2002).

However, in other respects the cognitivists were not so radical, and looking at Skinner's three principles of behaviourism, we can see that cognitivism left principles 2 and 3 untouched. Instead of Stimulus–Response, certainly, we had Stimulus–Cognition–Response, but the fundamental problem of 'motivation' remained. Moreover, cognitivism was an explicitly dualistic theory: 'mind stuff' was not 'brain stuff' (in the same way as software is not hardware). So cognitivists couldn't appeal to biological 'drives' any more than behaviourists could (for how was 'biology' to influence the mysteriously ethereal world of 'cognition'?). The cognitivist 'solution' to the problem of the complexity of human behaviour turned out to be a pseudo-solution.

A possible way out of this problem for the cognitivists was to appeal to the *social* as an explanation for behaviour, but this was another 'escape route' they closed for themselves. Like behaviourism, cognitivism kept analysis at the level of the individual. A new science, 'social psychology' had to be created to deal with this problem, and for 30 years or so social psychologists and 'real' psychologists of the 'brain is a digital computer' variety barely talked to each other.

There were a number of other implications of cognitivist psychology that were rarely explored except by Chomsky and philosophers of language, but they are nonetheless important because they were unconsciously adopted by most of the cognitivist 'revolutionaries'. Cognitivism is the oldest philosophy of psychology in the Western tradition in that it descends directly from Plato. It was Plato who first stated that 'expertise' *must* be codifiable in the form of rules (or else it isn't really expertise), that internal 'rules' act on 'symbols' (representations) expressible as words, and that words (specifically nouns) 'map onto' reality (Dreyfus and Dreyfus, 2000). In other words, when I say 'snow', the

word snow 'represents' (in a one to one 'mapping') the snow that exists in 'reality'. This seems commonsensical enough, but actually it smuggles in a huge assumption, that *the purpose of language is to tell the truth*. In other words what I am really saying when I say 'snow is white' is that 'it is objectively (veridically) true that snow is white'. When I say 'I am sad' I am making a veridical truth statement about my emotional 'inner state': the word sad objectively represents my inner state of sadness. And when I say 'I am addicted to heroin' I am making a veridical statement about my own 'inner state' of being addicted.

But this contradicts the overwhelmingly large amount of evidence showing that language is, in fact, functional: an attempt to get things done (Davies, 1992). Language is better seen as being 'functional discourse' than an attempt to make truth statements about the world.

Cognitivism, was, in other words, a bit like a drug. The initial 'high' was overwhelming, as psychologists thought they had stumbled into a brave new world in which the solutions to the problems that had confused the behaviourists were now within their grasp. But as with all drugs, there was a price to pay. Cognitivism had nothing to say about how people existed as social beings. It did not, in fact, solve the 'stimulus–response' problem. And it brought new problems of its own. Who, for example, was it that was using these 'internal rules'? Human beings use *external* rules. So who is 'inside us', that operates our internal rules? Cognitivism had to posit a 'homunculus'; a 'little man' inside us operated the rules. And then of course, there had to be a homunculus inside the homunculus. . . and so on, in a state of infinite regress (Wallace, *et al.*, 2003). The hangover from this particular intellectual binge was a heavy one indeed.

It was as a result of these and other problems, that the new schools of embodied, distributed, discursive and situated cognition arose. All these theories posit a radical break not just with behaviourism, but also from cognitivism. Specifically, the 'New Psychologists' argue that:

1. Cognitions are distributed, throughout systems and throughout social groups. Cognition, is, therefore intrinsically a social process.
2. Cognition is situated. Human beings exist in a 'systems' relationship with the world, in which feedback and feedforward causal 'loops' condition movement towards or away from homeostasis. Stimulus-Response (or Stimulus–Cognition–Response) is an absurdly simple model of the complexity of the realities of organisms moving in and out of homeostasis (or 'control').
3. Cognition is embodied. In other words, consciousness is an 'emergent property' of embodied, sociated organisms, in the same way that 'meaning' is an emergent property of language (that is, the 'conduit metaphor' is false: meanings are not 'put into' language (Moore and Carling, 1982)). The metaphor of mind as 'software' and brain as 'hardware' is highly misleading.
4. Language is primarily functional: that is, it is an attempt to 'get things done' not, primarily, to be 'veridical'. It is also situated: the response of subjects to questions (or, for that matter, questionnaires) is system (or context) specific. One cannot assume that a statement made in one context will necessarily be given in another. Statements are not 'representations' of 'inner states'.

It is clear that the 'new psychology' poses a rather radical challenge to the orthodox position. In fact, most of the 'problems' with which psychologists have wrestled over the years now look to have been fundamentally misconceived from the outset.

There is unfortunately no space here to discuss the pros and cons of the 'new' *versus* the 'old' psychology. However, suffice to say, if the 'new psychology' is accepted, the whole 'addiction' debate looks rather different. The debate as to whether addiction is a 'disease' or not, unfortunately remains, and, as this is a discussion about medicine can't really be settled by psychologists (except to note in passing that the whole 'debate' depends on what you mean by the word 'disease' and without an adequate definition of this word the whole argument is effectively meaningless).

However, the 'new psychology' does throw some light on some other aspects of the debate. Firstly, discursive psychology would insist that a subject's discourse about addiction is functional and system-specific. This explains certain experimental results (Davies, 1992) in which, when asked by drug users, other drug users stressed the 'hedonistic' aspect of drug taking, whereas when talking to drug professionals they stressed the extent to which they were 'addicted'. Therefore, the discourse of drug users was situation specific, and functional (in that it was not an attempt to provide a veridical description of an inner state, but was instead an attempt to play whichever 'language game' was being played).

Secondly that an adequate description of 'addiction' must be distributed'. In other words, the social aspects of these behaviours must be taken into account. For example it is well known that there is an effect of social class on, for example propensity to smoke. However 'sociological' effects like these are hard to square with cognitivist views of subjects as atomised, disembodied individuals (Becher *et al.*, 2000).

Thirdly the situational aspects of drug use. Drinking, smoking and taking drugs are situated activities, and can only be understood as taking place within a specific environment. For example, drinking behaviour in a bar differs greatly from drinking behaviour at home. The music played (in a bar) can affect drinking rates (counter-intuitively, the slower the tempo of the music the faster the drinking rate). Moreover, levels of cleanliness, seating arrangement and other factors can be statistically correlated with the likelihood of violence occurring in a bar environment. This is a very important and under-researched area (as opposed to 'individualistic' approaches to drinking, which stress, for example, genetic or internal predisposition towards drinking, which have probably been over-researched) (Graham, 1985).

Finally, the attempt to see addiction as an 'internal cognitive state' which one has or hasn't will be at best simplistic and at worse grossly misleading as a description of 'addiction'. Instead addiction should be seen as an fluid, embodied process in which an organism moves towards and away from homeostasis (rather than as a discrete mental state, 'caused' by a drug). This seems to have been acknowledged by Zuckerman who argues that 'causation is not an important question as we elucidate brain-behaviour feedback systems...taking drug addiction as an example' (Zuckerman, 1979, p. 379). This obviously implies that the debate over whether drugs 'compel' or 'cause' social actors to engage in certain 'addictive' behaviours (or not) is at best beside the point, and at worst effectively meaningless.

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