

On How We Can Act

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ABSTRACT. This paper focuses on two of the points raised in Sharrock and Coulter's (1998) critique of James Gibson's later theorizing. They argue that Gibson limited himself to an overly abstracted and unified notion of 'perception', and that his theory of affordances involved an overly restrictive claim about the 'objects' of perception. We suggest an alternative reading of the theory of affordances, namely as a *challenge* to the traditional theoretical schema of 'perception'. Gibson's last book, we argue, is primarily about agency, about how we can act. We accept Sharrock and Coulter's point that ecological psychology needs to find a place for 'concepts' in its account of human life, but we question their apparent a priori assumption that human 'perceptual activities' are entirely 'rule-governed'. The degree and manner in which concepts figure in human life is indeed a matter for investigation.

KEY WORDS: affordances, agency, concepts, ecological psychology, mutualism

Gibson's Project

Gibson's theoretical work was very much an ongoing campaign rather than a finished product, and, although he focused on the problems of 'perception', his real concern was the traditional conception of psychology, and its many dualisms:

[Psychologists] seem to feel, many of them, that all we need to do is consolidate our scientific gains. Their self-confidence astonishes me. For these gains seem to me puny, and scientific psychology seems to me ill-founded. At any time the whole psychological applecart might be upset. Let them beware! (Gibson, 1967, p. 21)

Thanks to his well-established reputation within mainstream psychology as an experimentalist, Gibson was not easily dismissed as a troublesome outsider. He was a troublesome insider, and his criticism was both persistent and searching. His continuing attempts to develop an alternative theoretical framework need to be understood in relation to this oppositional stance, and typically as attempts to dissolve rather than resolve many of the problems

regarded as fundamental to traditional psychology. His theorizing addressed a diverse range of agendas, the complicated legacy of the scheme of modern physical science. For, according to that legacy, psychology was set up to be the 'science of the unscientific': a paradoxical project in which the domain of the 'psychological' became identified with the scientifically intransigent and yet whose credibility as a 'science' required its continuing commitment to the very methodology which had defined its subject as an intractable residue.

Of Gibson's many publications, it is his final text, *The Ecological Approach to Visual Perception* (Gibson, 1979), that has provoked most attention and critical discussion. It is his most radical text, but also the least coherent. It was put together during his final illness, and it bears the marks of his piecemeal, adversarial approach to theorizing.

What distinguishes Gibson's final work from his earlier publications is its concentration on ontological rather than epistemological issues (although subsequent developments in ecological theorizing somewhat disturb that very distinction). Gibson rejected the central problem of classical theorizing, the attempt to reconcile the world we experience with the world as described in physical theory. 'Perceivers', he insisted, 'are not aware of the dimensions of physics' (Gibson, 1979, p. 306). He replaced the geometrical notion of 'space' with that of 'surface layout' (p. 3); the abstract dimension of time with that of 'nested events' (p. 100); and, most notably, the soundless, scentless, colourless, meaningless world of physical theory with that of 'affordances':

The *affordances* of the environment are what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill. The verb *to afford* is found in the dictionary, but the noun *affordance* is not. I have made it up. I mean by it something that refers to both the environment and the animal in a way that no existing term does. It implies the complementarity of the animal and the environment. (p. 127)

As Gibson went on to point out, affordances should not be regarded as 'abstract physical properties'; they 'have unity *relative* to the posture and behavior of the animal beings considered' (p. 127; emphasis added). Yet two pages later in the same book, Gibson, having reiterated his point about the relational status of affordances, makes the following categorical retraction: 'The organism depends upon its environment for its life, but the environment does not depend on the organism for its existence' (p. 129). This curious contradiction has been noted, and challenged, by numerous critics who have concluded, rightly in our view, that only a relational treatment of the concept of affordances can serve to undermine the traditional dualism of animal and environment (e.g. Ben-Ze'ev, 1989; Costall, 1981, 1986, 1995; Heft, 1989; Hodges & Baron, 1992; Katz, 1987; Leudar, 1991; Noble, 1981; Sanders, 1997; Shotter, 1983).

We agree with Sharrock and Coulter (1998) that there is good reason to be

wary of the abstracted notion of perception. One serious limitation of Gibson's last book is that it appears, at first sight, to be focused exclusively upon the topic of visual perception, in contrast, for example, to his earlier book, *The Senses Considered as Perceptual Systems* (Gibson, 1966), which not only treated the various senses as interrelated perceptual systems, but also regarded these perceptual systems in relation to a 'perceiver' who is active in the world. We agree that there are problems with Gibson's formulation of the concept of affordances. We disagree with Sharrock and Coulter, however, on what the theory of affordances is *about*. By the time Gibson wrote his last book, his concept of 'direct perception' had become so hedged with qualifications, contrasted with so many counter-positions, that it was very difficult to see what positive meaning it could possibly retain (Costall, 1988). In our view, the concept of affordances is not primarily about 'perception' but about the possibility of *agency*. Furthermore, insofar as affordances are indeed relational, activity and its 'affordances' are logically inseparable. Put differently, action is situated (see Costall & Leudar, 1996):

... the organization of situated action is an emergent property of moment-by-moment interactions between actors, and between actors and the environments of their action. ... This alternative approach requires ... a fundamental change in perspective, such that the contingency on action of a complex world of objects, artifacts, and other actors, located in space and time, is no longer treated as an extraneous problem with which the individual actor must contend, but rather is seen as the essential resource that makes knowledge possible and gives action its sense. (Suchman, 1987, pp. 179–180)

Admittedly, given Gibson's ambivalence about affordances, there are different ways to take the theory of affordances. One way, which accords with Sharrock and Coulter's critique, is as a claim about 'what we can see', and there is warrant for this interpretation in Gibson's statement that the '*central* question for the theory of affordances is not whether they exist and are real but whether information is available in ambient light for perceiving them' (Gibson, 1979, p. 140; emphasis added). There is, however, another way to take the theory of affordances, and that is as an attempt to undermine the traditional theoretical schema of 'perception'. The abstract term 'perception' is a creature of theoretical discourse, and its meaning, as Gibson was well aware, is intimately tied to the development of the practices of perspectival representation. 'Perception' had become identified with an observer epistemology. Thus, an alternative way to take the theory of affordances is as an attempt to 'write perception into the language of action' (Michaels & Carello, 1981, p. 43). In fact, Gibson's 1979 book is one of the first attempts, within mainstream psychology, to jettison the traditional scientific conception of the body as a stimulus–response or input–output mechanism which remains central to contemporary cognitivism. In line with

this alternative reading, Gibson's book is not primarily about 'perception' except as a target of subversion. It is about agency, and about 'how we can act'.

Minding the Gaps

Sharrock and Coulter are concerned with the gaps in Gibson's theorizing. They identify a primary gap between the object as encountered in perception and the object in itself, and take the latter to be an 'information emitter'. They regard this gap as arising from a continuing commitment by Gibson to a physicalist description of the world. There are indeed problems with Gibson's notion of information, if information is treated as an independent entity 'out there' in the environment (see Johnston, 1997). But, as we see it, there is a more fundamental problem. This concerns Gibson's treatment of affordances as independent entities 'out there' in the environment. Gibson's choice of the term 'affordance' as a noun was not a happy one. The verb form 'affording' better captures the emergent coordination of action and its 'situation'. The serious gap we identify in Gibson's theory arises from an abstracted, reified treatment of affordance, and we attribute this to his retreat not so much to physicalism but to traditional realism. According to such realism, the 'real' is defined by its independence of the 'knower', with the implication that 'knowing' occurs outside the 'real'. Far from 'realism', in this sense, being a mutually exclusive alternative to 'representationalism' (as Sharrock and Coulter seem to suggest), such realism, since it treats knower and known as existing in different realms, allows of no other possible kind of knowing than re-presentation. In contrast, a relational conception of affordance should help disturb the long-standing notion that the 'real' or the 'natural' has to exclude 'us' (see Mill, 1875). Of course, affordances can become reified not simply in theory but in practice (a chair is a chair regardless of whether I decide to use it as such), but such canonical affordances are not intrinsic to the object but 'impersonal'; they relate to traditions of practice (Costall, 1997; see also Noble, 1981, Sinha, 1988).

By the close of their paper, Sharrock and Coulter refer to another gap in Gibson's theory which they seem to treat as continuous with the gap they identify between the perceived object and the object as information emitter. They claim that Gibson was troubled by the need to 'fill in' the 'middle ground' between sensory physiology and our 'ordinary visual capacities and perceptual activities'. We are puzzled by this characterization of Gibson's 'problem'. Gibson was remarkably unimpressed by neurophysiology. In place of the mechanized corpse of traditional physiology, he appealed to something remarkably close to the phenomenological notion of embodiment. For Gibson, it was not a virtue but a fatal indictment of mechanistic

physiology that it has absolutely nothing to say concretely about how we experience or act upon our world.

Concepts and the Empirical–Conceptual Dichotomy

At several points in their article, Sharrock and Coulter invoke the familiar dichotomy between the ‘empirical’ and the ‘conceptual’, and they accuse Gibson of confusing the two. We find this dichotomy far from compelling. First of all, the term ‘empirical’ has a very definite history, one tied to the traditional schema of ‘perception’ (interestingly, in its early days, experimental psychology was criticized precisely for being *anti*-empirical insofar as it involved active intervention rather than detached ‘observation’). Secondly, concepts are not eternal Platonic forms; they have a history. What Sharrock and Coulter take to be confusion on Gibson’s part could be more charitably understood as a radical (if not completely satisfactory) exercise in conceptual revision motivated in no small measure by ‘empirical’, even practical, concerns about, for example, the safe navigation of cars on crowded highways and the ‘soft’ landing of very substantial aircraft on very hard runways. Nor are we entirely convinced by the rigid distinction within linguistic philosophy between theoretical and everyday talk. Everyday talk is hardly homogeneous and static, nor is it entirely insulated from technical discourse. Everyday talk is not simply informed by current theorizing *about* perception and memory, for example, but the very terms themselves have been imported from theoretical discourse. To the limited extent to which the term ‘perception’ is invoked in everyday talk it largely retains its technical sense and prestige.

Finally, we most definitely agree with Sharrock and Coulter that ecological psychology needs to find a place for concepts within its theorizing. Gibson was remarkably grudging in his acknowledgement of the role of language and even the social in human life, and, as we have argued elsewhere, this wariness derived from his concerns about the moral and political implications of cultural relativism (Costall, 1995; Costall & Still, 1989). But we, in our turn, would be very wary of any resort to an overly intellectualized treatment of human psychology, and we would have misgivings about treating concepts as an individual ‘possession’ or the intelligible as exclusively linguistic. We regard concepts as a resource, invoked and contested in particular settings (Leudar & Costall, 1996, 1997). The ways in which concepts figure in human life is indeed a matter for investigation, and not a ‘conceptual’ issue to be resolved a priori. We would not ourselves therefore count conceptual analysis among the ‘ethnomethodological and related inquiries’ appropriate for the task at hand. Conceptual analysis begs rather than addresses the relevant ‘empirical’ question, namely

in what manner and to what extent are 'perceptual activities' in fact 'rule-governed'?

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