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Affordance theory

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Affordance Theory: A Rejoinder to 'Musical events and perceptual ecologies' by Eric Clarke et al

Conventional scientific writing depends upon a highly proscribed complement of models and formulae with clearly defined methodological constraints. In "Musical Events and Perceptual Ecologies," Eric Clarke, whose work lies between musicology and music psychology, seems to prefer a strategy of free induction grounded in thick descriptions of musical experience which, while perhaps broadly phenomenological in spirit, are never bound by its technicalities. His tone is compassionate and holistic, and his illustrations often privilege the immediate personal reflections of listeners who would otherwise be relegated to the margins of mainstream musicological analysis. He draws upon a range of repertoire which is decidedly progressive, linking classical standards with anything from free improvisation to electronic dance music. As a psychologist he seeks to identify universals, but the sense of the universal one gets from his writing is remarkably plural. In this sense he inhabits a space between the sciences and the humanities which is arguably quite unique to the social psychology of music in Britain, a body of research mainly conducted in arts rather than in science faculties, often funded by arts rather than science research councils. Clarke may seek universals, but his universe is plural and resists prescription.

What universal could be more plural and less prescriptive than *affordance*? Clarke's core concern with boiling down the ways listeners grasp, reflect upon and use music in terms of ephemeral, relational, ecologically-situated affordances stems from a long series of publications, going back nearly two decades in his work and that of his students (Clarke 2005; Windsor 2004; Dibben 2001). The article in question does little to extend this body of work, which left me with the impression that Clarke expects his reader to take affordance as established orthodoxy, the explanatory power of which is no longer contested. This is at least strongly implied by Clarke's use of the term 'law' to describe the ways affordances are 'specified in' the information that listeners detect in musical sound. There seems to be nothing we can do with music that isn't afforded by our immediate interaction with it. And yet most arguments in support of the theory underscore its apparent power to evade the limits to our perception associated with mediating factors like mental representation or material inscription. I find this paradox intriguing.

The earliest use of affordance I have seen in the music literature comes from Clarke's contemporary, the sociologist Tia DeNora, in her book *Music in Everyday Life*. Responding to an analysis of the opera *Carmen* by musicologist Susan McClary, DeNora seeks an empirical solution to the question of whether the music's gendered connotations are 'immanent' or 'arbitrary' (DeNora 2000, 24). She finds a middle way, concluding that, while it is impossible to determine the work's meaning absolutely for *all* listeners, an *individual* listener's interpretations can be understood as concrete efforts to appropriate the music as a resource for self-expression or self-construction (DeNora 2000, 43-44). The advantage she sees in the concept of affordance is that it conserves the margin of freedom that makes each musical experience unique. They do so because they are situated effects of the relation between object and user, and not inherent properties of the object that it imposes upon users independently of their action. DeNora appears to have been so convinced of the value of this insight that she claims it as her own innovation. In a brief passage outlining the history of the concept she seems to suggest that affordances were originally conceived as inhering in objects independently of the user's perspective (DeNora 2000, 40).

A bit of history shows how just wrong this is. Affordance theory has its roots in the wartime research of American psychologist James J. Gibson. During and directly after the Second World War, Gibson was employed in a series of military programs, first in the Flying Training Command and later in the Motion Picture Research Unit of the Aviation Psychology Program, the objective of which was to understand and assess the visual aptitude of pilot applicants and develop effective training films (Hochberg 1994, 154). Epistemological links to a first-order cybernetic worldview are no coincidence. The main advantages of affordance theory can be expressed as responses to the

same pragmatic challenges that inspired Gibson's contemporaries like Norbert Wiener and Gregory Bateson: its emphasis on dynamic instrumental mastery, its support for the ideal of homeostatic self-regulation, and its openness to a sufficiently broad range of purposeful tests. Gibson insisted on a holistic, relational account of perception, in which motivations and intentions emerge from the dynamic flux of situated activity. He was fully aware of the implications of his approach, and of the broader conversations to which it contributed. His theory speaks to his deep commitment, shared widely among cybernetic thinkers, to the radical empiricism of William James, which he had encountered at Princeton through his teacher Edwin Bissell Holt (Hochberg 1994, 152; Peters and Peters 2016). This commitment was strengthened in reaction against the ideas of Gestalt psychologist Kurt Koffka, who Gibson encountered during his first teaching appointment at Smith College in 1928. Koffka was convinced that the reason things looked as they do lay in the imposition of 'field forces' by the central nervous system on the raw data given through the senses. While he shared Koffka's disdain for behaviourism, Gibson took the implicitly Jamesian position that experience must always arise in the thick of relation, and could never be reconstructible from raw sensory data (Hochberg 1994, 153; James 1907).

Psychologists today, of course, work with practical and conceptual limitations that William James in his day could not have foreseen – for one thing, the margin for speculation is far smaller than it once was. The pragmatist insistence on the plural and indeterminate (or better, to borrow a term coined by Michel Serres, *pandeterminate*) nature of causality would be difficult to reconcile with contemporary methods, surely just as difficult as it would have been for Gibson to put into action in the course of his military research. It can hardly be surprising, then, that Gibson chose to bind the theory of affordances to the direct, immediate relation between perceiver and object – it is difficult to imagine any higher level of complexity being useful for the production of a pilot training film. Clarke adopts a similar constraint with respect to music. Wherever wider, interpersonal (perhaps also more abstract) sources of meaning such as culture, history or politics come into play, he is satisfied to explain them by the same homeostatic endeavour of immediate action-perception: these are just more diffuse examples of the 'wind' that blows across the surfaces of autonomous, information-seeking organisms as they make their way through a fundamentally interconnected world, the meaningfulness of which can be presumed in advance.

This is where the theory of affordances and philosophical pragmatism seem to part ways. The literature on musical affordances frequently portrays listeners' engagement with culture as a kind of 'hunting' that takes place in a world structured in terms of opportunities and utilities (Windsor and de Bézénac 2012, 115). But it makes sense from a pragmatist perspective to question whether scaling up the immediate encounter between subject and object does in fact lead to a sufficiently holistic account of cultural experience. Cultures, if they exist as empirical objects at all, must operate beyond the threshold where individual adaptive action can have direct causal effects. Gary Tomlinson's recent (2013) work on the evolution of musical behaviour invites us to think of culture as 'uncoupled' from direct selective pressures. If enculturation boils down to exposure to unitary forces in the environment, then our awareness of it is limited to the individual 'niche-making' behaviours of the 'participants' in our neighbourhood.

Moreover, reducing culture to a set of desirable opportunities to which one adapts through exposure seems to me to exclude forms of enculturation, such as formal education and training, that, while presumably universal as far as human culture is concerned, are not necessarily appealing to the participants and not necessarily oriented towards immediately meaningful concerns or utilities. It also short-circuits any critical contestation that might be raised over the meaning and utility of the things that people have been taught. As Clarke explains, the meanings that occur to different interpreters of the same object are the result of the different 'affordances' that arise from their different information-seeking grasps on that object. Although contestation is probably, again, a universal aspect of human enculturation, affordance theory leaves little room for criticising or

reconsidering what other people think an object means – no person's perception can be wrong, only insufficient (cf. Fodor & Pylyshyn 1981, 153-155). If sufficient perception is equivalent to correct perception, then what is directly available to us in the environment must always be correct, and thus incontestable. It matters from a pragmatist perspective, however, that we be able to understand even the most naturalistic picture or recording not simply as a document of or vehicle for unmediated perception, but as expressing qualities or telling stories in a way that is mediated by the maker's instruments, and may not be true or good (Dewey 1934, 237). Surely we can reject mentalism without rejecting the kind of intellectual judgement that makes this kind of critical distinction possible.

I understand that the attempt to encompass culture in an ecological theory of music perception is motivated by a desire to move away from putatively more solipsistic 'information processing' approaches. However, I question whether it is fair to claim that Gibson improves on the account of culture offered by information theorists like Leonard Meyer and Abraham Moles. For all the problems with his theory, Moles at least has a similar account of the iterative shaping of musical objects and subjects, and is keen to place an authentic phenomenology of musical experience above purely acoustic representations (Moles 1968, 68). Moving the locus of information from the mind of the perceiver to the relational contact between perceiver and music does not seem to me to do much to change the constraints of the inquiry or the explanation. Information theory has always been relational in this sense. Nor is it really fair to contrast a Gibsonian view with 'structuralism' as Clarke does. In fact, Clarke's structuralist strikes me as a bit of a straw figure. Structuralism in psychology and the social sciences (e.g. in the work of Lévi-Strauss, Piaget, Chomsky, etc.) is not a claim that meaning is fixed in works of art, but rather a claim that we can find basic patterns of perception or action that play a generative role in shaping the diversity of human expression and experience. This view arises from the same pragmatist and Gestalt precursors that inspired Gibson.

All this would be little more than genealogical quibbling if Gibsonian theory offered some new insight into musical listening. At least in Clarke's article, however, the end goal seems to be to naturalise what is effectively a standard European hermeneutic perspective, with musical objects working as interfaces between individual and society, which listeners interpret from a perspective that is structured against a horizon of sedimented cultural history. In other words it does nothing to challenge the normal run of musicological scholarship. There are many ways that the situation could be improved without falling into mentalism or prescriptivism. More attention could be paid to the broader implications of pragmatist thinking, which has always embraced the existence of abstraction, such that concepts, cultures and affects might arise and circulate independently from the direct encounter between subject and object. We would be in very dangerous territory if meaning was simply a matter of what is immediately natural and useful to us. What is especially worrying, however, is the tendency in the Gibsonian literature to put down as ecological only 'flourishing', 'active' and 'comfortable' types of behaviour. The goodness of nature is not self-evident. Psychologised narratives of harmonious empathy and connectedness in no way exhaust the possibilities for musical experience, and more importantly they provide a convenient source of support for the kind of domesticated, conforming, 'pro-social' affectivity demanded by network capitalism (Slaby in preparation). And they certainly put us no closer to changing our circumstances on a scale larger than our immediate niche, which, now more than ever, is the kind of action that an ecological theory should be able to address.

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