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Synonyms

Affordance; Direct perception; Ecological psychology; Environment-organism systems; Information-based approach; Perception-action theory; Social cognition; Social interaction

Definition

Social affordances are possibilities for social interaction or possibilities for action that are shaped by social practices and norms.

Affordance

The term "affordance" was coined by James Gibson to refer to what things or events in the environment afford to an organism. For instance, a rigid flat surface affords support and locomotion to terrestrial animals. It is stand-on-able and walk-on-able (Gibson 2015). The water surface of a lake does not afford support to a terrestrial animal, but it does to some flies. Thus, the same part of an environment may afford different things to

different species or organisms. This is because affordances are relational in nature, they are both a fact of the environment and a fact of the organism. According to Gibson, affordances are neither subjective nor objective, they cut across the dichotomy of subjective-objective. There has been debate among ecological psychologists as to what in the organism is responsible for an affordance. The options range from bodily properties to dispositions to abilities (Chemero 2003). In all cases, such organismic elements are what turns a feature of the environment into a possibility for action that is meaningful to the organism.

Affordances are crucial for the ecological approach to perception. The environment shows up to an organism in terms of what it can do in it. An organism perceives by picking up environmental information that specifies the affordances of the environment. This point is crucial to understand Gibson's approach to perception. According to the ecological approach, the environment is rich of structures and energy patterns that convey information about objects and events. Information for Gibson is a relation of specification established by lawful covariation between patterns of energy – optical, mechanical, and chemical – over time and/or space and objects or events in the environment. For instance, structured ambient light conveys information about surfaces of objects. As this information is structured over time and/or space, the organism needs to explore its environment to pick it up. Gibson explains the process of picking up information by the radio

metaphor. Through exploratory movements, the organism becomes attuned to environmental information and resonates to it. Inasmuch as an organism resonates to information, it is able to perceive affordances directly. Thus, perception is an active process that takes place over time and whose main function is to pick up information that specifies affordances.

Social Affordance

Although Gibson did not systematize theoretically the notion of social affordances (Costall 1995), he was open to it and gave several examples of social affordances. His example of the postbox as an object that "affords letter-mailing to a letter-writing human in a community with a postal system" (Gibson 2015, p. 130) is well known. Gibson also called attention to the fact that an animal, as a self-moving being with characteristic behaviors and anatomy, affords peculiar possibilities for action to other animals. An animal "can afford eating or being eaten, copulation or fighting, nurturing or nurturance" (Gibson 2015, p. 36). Some of the latter examples, such as eating and being eaten, may not yet be considered full social affordances inasmuch as they elicit behavior in another animal but not necessarily social interaction. To have social interactions the participatory animals must have a minimal responsiveness to each other as self-moving beings and their behaviors must be mutually constrained while they are engaged in an activity. As Gibson points out, "as one moves so does the other, the one sequence of action being suited to the other in a kind of behavioral loop. All social interaction is of this sort—sexual, maternal, competitive, cooperative" (Gibson 2015, p. 36). Thus, in virtue of the coupling between the caregiver and the infant in several mammals, the caregiver affords the infant the possibility to clung and contact comfort. For species capable of joint attention, the joint perception of a predator might afford the social affordance of outnumbering our foe. Among some primates, grooming behavior affords social bonds.

The example of the postbox and the examples of social interactions point to two different senses in which the term "social affordance" is normally used. In the postbox case the letter-mailing affordance is social because it depends on an ongoing social-cultural practice to be available. An agent from a culture without a postal system and having no idea of what a postal system is cannot perceive the postbox as affording lettermailing. To be open to this affordance, the agent needs to be normatively responsive to and constrained by the social practice in question. In contrast to generic affordances, which can be understood in terms of the individual-object dyad, this type of social affordance requires also the social system of mutual responsibilities and conventions within which an object gains a peculiar function. In relation to social creatures like us there has been debate about whether all affordances are socially shaped in this way (Costall 1995). As to the second group of social affordances, they are social because there are possibilities for interaction that other persons or animals afford. Through these affordances a person or an animal shows up to an observer not as a physical object but as an agent with the capacity to reciprocate. These are "the richest and most elaborate affordances of the environment" (Gibson 2015, p. 126), they comprise the most basic kind of social cognition that makes cooperation and coordination possible, as well as predator-prey interactions. This type of social affordance is allegedly more fundamental since it seems to be required by the social-cultural practices that underpin the first type of social affordance.

A common criticism of the very possibility of perceiving social affordances is that there is no information about them in the environment. As the argument goes, the ambient light might contain information about objects, their surface layout, texture, and colors, but not about whether they afford, for instance, letter-mailing. The social function of an object is not perceptible. An agent comes to know that a postbox has this function only by inference. The same applies to social affordances regarding persons and animals. Possibilities for interaction are allegedly not perceptible, there is no information in the environment

about whether an animal affords cooperation or aggression. An animal can see movements and facial expressions of another animal but not that it is open to and waiting for interaction. Gibson himself claims that "other animals and other persons can only give off information about themselves insofar as they are tangible, audible, odorous, tastable, or visible" (2015, p. 127), which raises the question about whether other animals and other persons can give off perceptible information about their social affordances.

A set of considerations may help to put away the worry above. The first point to notice is that the animal's movements, gestures, and facial expressions can be sufficiently patterned over time and/or space to specify a wide range of possibilities for interaction. By picking up such a pattern, an observer may be said to perceive directly the corresponding possibility for interaction. This, however, might not be enough to resolve all possible ambiguity. A second consideration concerns the notion of information itself. One possibility to have more information in the environment regarding social affordances is to weaken the notion of information. Instead of requiring a specifying relationship, it may be enough a probabilistic relationship between an energy pattern and a social affordance in that the former makes the presence of the latter likely (Bruineberg et al. 2019). Another alternative would be to relativize the notion of information to environments or habitats. A specifying relationship does not need to hold over all environments to make perception possible. A local specifying relationship that holds only in a specific environment might be sufficient to perception provided the perceiver dwells in that environment. Thus, optical information about the postbox might be sufficient to specify the letter-mailing affordance in a social environment where there is a postal system.

A further consideration on this issue is that the social environment should not be taken as detached from the natural environment; actually the dichotomy between nature and culture should be overcome. For many species, particularly ours, the social is a background condition not only for their evolutionary history but also for the

development of their members (Heft 2007) so that a new member with cooperative dispositions enters in an environment which is already socially structured. In relation to practices within a social environment, complex energy patterns may convey information about social affordances for beings with prosocial capabilities immersed in those practices.

Both affordances shaped by social norms and affordances for social interaction are important for ecological psychology to address the scaling-up problem - the problem of accounting for the higher-order cognition, such as planning, imagination, abstract thought, and language use based on basic cognition such as the perception of affordances. Attempts have been made to apply social affordances to explain planning (Kiverstein and Rietveld 2018). Synergies between ecological psychology and enactivism have been explored. Some argue that an enactive account of language can augment social affordances to deal with planning and distal engagement (Brancazio and Segundo-Ortin 2020). In anthropology, social affordances have been mobilized to overcome the dichotomy between nature and culture and to show how the human living world is socially structured and meaningful independently of symbolic thought (Ingold 2000).

The realm of social interactions has also been studied within ecological psychology, providing a rich repertoire of subtypes of social affordances to explain complex social behavior. One may distinguish, for instance, common affordance from joint/shared affordance. The former is the affordance of an object that may induce emergent coordination, such as the arrival of a bus awaited by many passengers. The latter is "an affordance for two or more people collectively which is not necessarily an affordance for any of them individually" (Knoblich et al. 2011, p. 63), such as a long two-handled saw that affords cutting to two people acting together but not to one acting alone. Both common and joint/shared affordances are also distinct from collective affordances. These are affordances available to collectives – groups of individuals who share an embodied social identity. For instance, during a match of football, the situation in the pitch may offer the collective

affordance to play a counterattack to the recently attacked team (Weichold and Thonhauser 2020). Thus, social affordances provide a powerful resource to explain a great variety of social interactions and how they may combine to give rise to complex cognition and behavior.

Cross-References

- ► Affordance Learning
- **▶** Cooperation
- ► Embodied Perception
- ► Perception-Action Theory
- ▶ Pro-social Behavior
- ► Social Grooming
- ► Social Learning

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