Chapter 17 A Husserlian Approach to Affectivity and Temporality in Affordance Perception



Juan Diego Bogotá and Giuseppe Flavio Artese

17.1 Introduction

Famously, J. J. Gibson (1977/2017) coined the term affordance to refer to the action possibilities offered to a given animal by the environment. However, he also claimed that, even if affordances are always perceived from the perspective of individual animals, their existence is fully independent of those who perceive them. The rejection of the idea that affordances are animal-dependent comes from Gibson's dissatisfaction towards the subjective-objective dichotomies present in the psychological theories of his time—theories that still today play a central role in the cognitive sciences. In contrast, the concept of affordance was supposed to cut across all possible forms of dualism and, as we understand it, be the starting point for a new relational ontology. However, the characterization of the notion of affordance has been often found obscure and has generated some confusion even among the most enthusiastic ecological psychologists. As a matter of fact, despite the anti-Cartesian and non-dualistic tendencies shared among all Gibsonian scholars, the ontological debate behind the same notion of affordance includes several proposals. It has been discussed whether affordances should be better defined as environmental resources (Reed, 1996), as dispositional properties (Turvey, 1992), or as relations between abilities of the animal and aspects of the situation (Chemero, 2003, 2009). In this paper, we are not aiming to provide either a fine-grained taxonomy of the different proposals (however, see Rucińska, 2020) or an extensive discussion of the points of

J. D. Bogotá (⊠)

Department of Sociology, Philosophy and Anthropology, University of Exeter, Exeter, UK

Filosofía y cognición, Universidad Nacional de Colombia, Bogotá, Colombia

e-mail: jb1244@exeter.ac.uk

G. F. Artese

Institut für Philosophie, Universität Kassel, Kassel, Germany

e-mail: Giuseppe.Flavio.Artese@uni-kassel.de

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strength and weakness of each individual ontological stance. What seems problematic is that, on the one hand, if affordances are thought of as nothing but physical properties, it is unclear in which sense they must be understood in reference to a certain animal. On the other hand, if affordances are to be understood in reference to an animal, it is unclear in which sense they are not animal-dependent. These ambiguities have led some neo-Gibsonians to think of affordances as latent properties existing independently of individual organisms or whole species (e.g. Fultot et al., 2016; Heras-Escribano, 2019). However, as Di Paolo noticed, assuming a God's eye view and claiming that affordances can exist even if there would be no extant species is something that can be claimed only hindsight and represents a dramatic universal disembodied statement (Di Paolo, 2016). Reasonably, this same assumption seems to contradict Gibson's idea of an irreducible mutuality between organisms and environment.

As most 4E theorists, we recognize the value of the notion of affordance. However, in this paper, we aim to provide a phenomenological characterization of the perceiver's role in affordance perception. We believe that such a phenomenological approach is pivotal for the understanding of affordances. More precisely, we argue that proper phenomenological descriptions can provide important insights into how perceivers participate and contribute to the emergence of affordances. What is distinctive of the phenomenological tradition is the interest in the essential a priori structures and structural invariants of experience. If affordances are understood as phenomena that cut across "the dichotomy between subjectivity and objectivity", it spontaneously follows that their existence depends on environmental features as much as on the active role of situated subjects whose experience can be described phenomenologically. If our proposal is right, and thus phenomenological analyses can enrich our understanding of affordance perception, particular attention is to be paid to the affective and temporal characteristics of the phenomenology of experiencing an affordance. More specifically, we look at these phenomena as characterized in the work of Edmund Husserl. While the claim that phenomenological investigations can contribute to our understanding of the nature of affordances is something that has been discussed in the past (see Käufer & Chemero, 2021; Dings,

¹It should be acknowledged that there might be some tension between phenomenology and ecological psychology insofar as the former (especially in its Husserlian version) is explicitly antinaturalist, whereas the latter "rejects the causal reductionism of other scientific psychologies but without rejecting their emphasis on experiment and empirical explanation" (Reed, 1996, p. 19). It would go beyond the scope of this paper to delve into Husserl's anti-naturalism and the possibility of integrating phenomenology and ecological psychology. Suffice it to say that, from a Husserlian standpoint, consciousness should be seen as a condition for the natural world to appear, and thus, it would be a category mistake to study consciousness from the perspective of the natural sciences for they assume that the objects they study are *in* the natural world. We believe, however, that a non-objectivist scientific approach to the mind (such as ecological psychology) and/or a re-conceptualization of the idea of *nature* could be consistent with phenomenology's anti-naturalism. For a brief suggestion on how ecological psychology and Husserlian phenomenology could be integrated, see Roy et al. (1999, pp. 68–71). For more on the idea of re-thinking the concept of *nature* and thus opening the possibility of integrating a new kind of naturalism and phenomenology, see Vörös (2014) and Gallagher (2018).

2018), to our knowledge, the phenomenological aspects of temporality and affectivity have been so far largely unexplored by affordance theorists. Importantly, in the current work, we sympathize with the relational approach developed by Chemero (2009). By considering affordances as emergent relations in which both the animal and its surroundings are constitutively necessary for the existence of affordances, his approach can fully embrace the considerations made by Husserl in which phenomena such as temporality and affectivity are necessary for the phenomenological appearance of the functional character of everyday objects. We are also aware that our proposal represents a departure from Gibson's original ideas in which ecological information is exclusively contained in the environment as something that "need only to be attended to" (Gibson, 1972, p. 79). Our considerations instead resonate with the notion of ecological information as developed by van Dijk et al. (2015). The notion of information here discussed, that the authors define as *informationhow*, is not independent of its usage, and it is maintained through the activities of a community of agents through their histories of interaction.

17.2 Affordances: Beyond Objectivity and Subjectivity

The experience of a climber who is in front of a climbing wall can, without hesitation, be used as an example to elucidate the value that phenomenological analyses can play regarding affordance perception.

As anyone who has gone to an indoor climbing centre knows, a climbing wall has several holds that have different shapes, sizes, and textures. For a climber, such holds appear, to a greater or lesser extent, as graspable—they *afford* being grasped. For instance, whereas a curvy-shaped hold that has a *pocket* in which the climber's hand could fit appears as graspable, a sharp-edged and smooth hold may appear less so (Fig. 17.1). In other words, the holds are perceived as graspable, and this is possible exactly in virtue of the relation between a subject and a specific object.

While most orthodox ecological psychologists would simply claim that the hold is perceived as graspable because it matches a bodily disposition of the perceiver (Turvey, 1992), we suggest that there is much more to be learnt if the experience of *graspability* is phenomenologically analysed. In the first place, through phenomenological descriptions, it is possible to further emphasize how the affordance of grasping is fully inherent to the perception of the hold. The perceptual meaning of the hold is in part constituted by what it affords. The hold is perceived as affording the action of grasping as part of its perceptual meaning. Importantly, affordances are, in a very specific sense, irreducible and genuinely given in pre-reflective experience. The climber does not have to think about whether a hold is graspable or not;

²To be sure, affection and temporality are not the only phenomenological characteristics that underpin affordance perception. One should also acknowledge, among other things, the experience of one's own embodiment, the sedimentation of habits or attunement towards daily sociocultural practices. However, we will focus on affection and temporality alone.





Fig. 17.1 Climbing holds. The left-side hold, as it has a shape in which a person's hand naturally fits, may appear as graspable. The right-side hold, because of its shape and texture, may appear as less graspable than the left-side hold

it just appears as so. Thus, to better understand the role that the subject plays, it is important to look into the phenomenology of affordance perception.³

It could be objected that our phenomenological emphasis might lead to thinking of affordances as completely subject-dependent. For instance, Heras-Escribano has claimed that "the main problem of the phenomenological approach is that it focuses on subjectivity; hence, phenomenologists endorse the subjective-objective dichotomy that is inconsistent with the ecological approach and the nature of affordances" (2019, p. 105). However, it is important to emphasize that, from a phenomenological characterization, it does not follow that action possibilities are just a mere projection or a private affair of the perceivers. Phenomenology, as a philosophical method, is not aimed at grasping a private and inaccessible mental domain in which the subject is trapped inside. The phenomenological method is instead concerned with the rigorous study of the invariants that are essential to different experiences. Therefore, a phenomenological analysis of affordance perception does not aim to disclose a private mental domain, but a set of structures that are essential to such a kind of experience. It follows that the emphasis on first-person analyses that

³The relevance of a phenomenological analysis of affordance perception has already been pointed out by Dreyfus and Kelly (2007), as well as other authors inspired by them. However, most (if not all) those phenomenological approaches to affordance perception have usually drawn to Merleau-Pontian phenomenology, rather than from Husserlian phenomenology as we do.

characterizes phenomenological investigations can be seen as a valid complementation to ecological descriptions. Furthermore, phenomenologists would agree with Gibson in claiming that affordances are both objective and subjective. They are *objective* in the sense that they are aspects and features of the objects perceived in the world. However, they are also *subjective* in the sense that they only make sense as appearing from the perspective of an animal. Thus, from our phenomenological standpoint, Gibson's words are confirmed: "an affordance is neither an objective property nor a subjective property; *or it is both if you like*" (1979/2015, p. 121, emphasis added).

At this point, a Gibsonian may object that by suggesting that, from a phenomenological perspective, affordances can be understood as both subjective and objective, we are ignoring the fact that the theory of affordances is meant to show the inadequacy of the subjective-objective dichotomy. For instance, Gibson claims that "the absolute duality of 'objective' and 'subjective' is false. When we consider the affordances of things, we escape this philosophical dichotomy" (1979/2015, p. 35). In a word, affordances point towards the unity of the organism-environment system and not towards a distinction between a subjective organism and an objective environment. Therefore, it would be a mistake to describe an affordance as either subjective or objective as we have done. However, we believe that our phenomenological approach does not subscribe to a traditional dichotomy between subject and object. By arguing that affordances are both subjective and objective, we claim that an absolute duality (as Gibson calls it) between those two poles is untenable. Moreover, a phenomenological analysis like ours is well-fitted to address the experiential dimension of affordance perception without dividing the so-called organismenvironment system. As phenomenologists often suggest, a careful analysis of experience reveals an essential correlation between consciousness and world.⁴ The phenomenology of affordance perception is a great example of how subjectivity and objectivity are always correlated. Our proposal consists precisely in claiming that, phenomenologically, this dual—or perhaps ambiguous—nature of affordances can be appreciated by analysing the affective and temporal characteristics of affordance perception. We now turn to them.

⁴Our phenomenological approach to affordance perception needs thus to be differentiated from the idea that perceivers project or construct a subjectiveenvironment. Instead, we think of agents as actively disclosing their meaningful surroundings. This difference can be furtherly highlighted by comparing ourproposal with the contemporary approaches in biosemiotics that stemmed from the work of Jakob von Uexküll. For him, as much as for his followers (e.g. Kull etal., 2011), agents, through the receptors of their physiological apparatuses, literally create their niches. As von Uexküll puts it, "So in the nervous system thestimulus itself does not really appear but its place is taken by an entirely different process which has nothing to do with events in the outside world. [...] Thestimuli of the outside world are altogether translated into a nervous sign language" (1909/1996, p. 33). As it should be clear at this point, we reject thisconstructivist view in favour of a relational approach to affordances.

17.3 Affection and Temporality as Preconditions for Affordance Perception

As the climber is standing in front of the climbing wall, some of the holds appear more inviting than others. Indeed, depending on its shape and texture, the distances between it and the climber, and even the climber's skill and embodiment, a hold may seem somewhat more (or somewhat less) alluring in contrast to other holds. This allure is what Husserl calls *affection*:

By affection we understand allure given to consciousness, the peculiar pull that an object given to consciousness exercises on the ego; it is a pull that is relaxed when the ego turns toward it attentively, and progresses from here, striving toward self-giving intuition, disclosing more and more of the self of the object, thus, striving toward an acquisition of knowledge, toward a more precise view of the object. (2001, p. 196)

Importantly, an object does not affect in isolation. It always affects from within a background. Think about a red dot in the middle of a white canvas. The red dot is alluring because of the stark contrast between it and the white background. If, instead of being on a white canvas, the red dot was in the middle of one of Pollock's artworks, it would not be as salient precisely because of a lack of strong contrast.

Husserl limits his analyses of affection to the purely sensory domain, but it can be smoothly extended to world-involving and meaningful activities.⁵ From the perspective of the climber, all the holds in the climbing wall are affective to a lesser or a greater extent, but some of them are more alluring precisely because of the contrast of how grabbable they appear. So, for instance, if the two holds that appear in Fig. 17.1 were right beside one another roughly at the same distance from the climber's location, the curvy-shaped hold would probably appear to the climber as more alluring than the sharp-edged one. Importantly, based on the situation, the inviting character of the two holds can drastically vary in such a way that one can prevail over the other. Thus, one might say that one hold has more affective power than the other one.

What does it mean to say that an object is alluring (i.e. affective)? For Husserl, it simply means that it draws the attention of the subject (in the case of the example, the climber). However, it is possible to highlight that there are different ways in which an object may draw one's attention. For instance, the red dot in the middle of the red canvas draws attention by motivating the observer to look at it. In contrast, the curvy-shaped hold draws attention by motivating the climber to grasp it. Notably, both ways of drawing a subject's attention involve an affordance: the red dot is *lookable* and the hold is graspable. In general, objects draw our attention by motivating

⁵A similar take on the role on affectivity has been embraced in empirical psychology by Frijda (2004) and Lambie (2020), among others.

us to practically engage with them in different ways.⁶ Therefore, affection is affordance-related, and meaningful affordances are affective.⁷

What is interesting about the affective nature of affordances is that, from a phenomenological perspective, affection is a felt *pull* coming from what is affecting the agent. It is not something that can be understood as an intracranial phenomenon or something that the subject projects onto the environment. Rather, affection is experienced as a centripetal force—assuming the subject as a metaphorical centre of curvature—in between the affected subject and the affecting object that can only arise given the physical properties of the latter and its surroundings and the fact of there being a subject who can interact with the affecting object. Indeed, the red dot affects the way it does partly because of its colour and the contrast between it and the white background. The curvy-shaped hold affects the way it does partly because of its shape and because of the contrast with other surrounding holds. In other words, part of the affective nature of affordances must be understood in reference to the physical properties of the objects and their surroundings. Thus, there is something irreducibly *objective* (in the sense of, object-dependent) about the phenomenology of affordances.

Affordances, however, are not entirely *objective* in the sense just described. As mentioned, their affective nature is in between what is objective and subjective. From the side of the perceiver, a crucial role for an affordance to emerge and be detected as meaningful is related to the temporal dynamics intrinsic to experience. Briefly, Husserl (1991) described the experience of time as constituted by three intertwined intentions: *retention*, *primal impression*, and *protention*. Put simply, at any given moment, one is not only aware via primal impression of what is happening in the current instant, but one is also pre-reflectively aware of what just happened via retention and what is about to happen via protention. At any given moment, one is simultaneously conscious of the just-past, the immediate present, and the near future. In other words, one does not have an experience of a "knife-edge" present but of a "duration block" which Husserl dubs *the living present*.

⁶This can be related to Dreyfus and Kelly (2007), who anticipated that, when manifesting, affordances are perceived as *solicitations*. We suggest that, while more than one affordance can have an *inviting character*, the subject will tend towards one specific action possibility depending on their affective force.

⁷Here *affectivity* is understood in relation to the possibility of being affected, i.e. to be allured or to undergo a stimulus ("*Reiz*" in German). This sense of affectivity might seem very different from the one related to *affective states* such as emotions or moods. We believe, however, that both senses are intrinsically related. For instance, something disgusting may draw one's attention because of how disgusting it is. Furthermore, Husserl (2006, Nrs. 69–75) himself suggests that affection may be defined by feelings of pleasure or displeasure (*lust* and *unlust*) that motivate the ego to react in different ways. In a few words, both senses of *affectivity* are connected by the idea that something can only affect if there is a lack of indifference towards it (Colombetti, 2014). A full-fledged phenomenological analysis of affordances would have to say much more about the affective nature of affordances.

⁸There are several subtle and complex relations between retention, primal impression, and protention which constitute the living present. It is, however, impossible to develop this topic further in this paper. See Husserl (1991, 2001).

What is relevant about the structure of time consciousness is that one is always aware of the near future. There are several ways in which protention constitutes one's experience of the world. For instance, while listening to a melody, even for the first time, one already pre-reflectively anticipates vague ways in which it might continue. Or, for a more relevant example, when the climber sees the climbing wall in front of her, she already pre-reflectively anticipates vague ways in which certain holds can be efficiently grabbed. In other words, the hold affords grasping because it is experienced as being potentially grabbed in the future. It is not only that the physical properties of the hold constitute part of its *graspability* but also the fact that the climber protends such grabbing. Such protention is like a centrifugal force that connects the embodied subject with the object. Without there being such anticipatory dynamics within experience, affordances would not emerge from the perspective of the subject. What we want to emphasize here is that the conscious temporal dynamics that are intrinsic to every experience play a central role in our understanding of how affordances are unfolded in the phenomenology of any individual agent.

Interestingly, it is under the correlation between the centrifugal and centripetal aspects of affordance perception that it becomes evident that affordances cannot be reduced to either purely objective or purely subjective properties. This fact becomes particularly salient in an example that is less artificial than that of wall climbing. Take the different experiences of a rock climber who goes to the same mountain at two different times of the year: summer and winter (Fig. 17.2). The two experiences are very different from one another insofar as different affordances appear for the

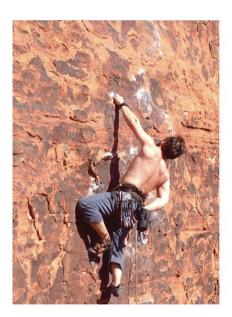




Fig. 17.2 Rock climbing. The same environment may afford different action possibilities insofar as it is in constant flux. The same rock wall may affect a rock climber in a specific way during summer (left) which is very different from how it might affect him during winter (right)

rock climber. Indeed, even though in a sense the rock wall is the same in both experiences, it affects in two radically different ways, entailing two radically different ways of anticipating possible paths for the rock climber. Thus, changes in the environment entail changes in how the field of affordances is experienced. Correlatively, changes in the rock climber also entail changes in how she experiences the field of affordances. Perhaps she has climbed the same wall in the past; perhaps she just saw somebody else climbing the wall; or even, there might have been an increase in her muscular weight. These changes entail different anticipations, different affordances that become salient from the perspective of the rock climber. Thus, affordance perception emerges from the interplay between how the environment affects the subject and how the subject anticipates possible ways of acting on the environment.

17.4 Conclusion

In this brief paper, we have emphasized how phenomenological analyses can support Gibson's formulation of affordances as being simultaneously *objective* and *subjective*. We drew on Husserl's analyses of affectivity and temporality to provide a more fine-grained understanding of the role of the subject in affordance perception. Our discussion seems to suggest that affordances involve both centripetal and centrifugal aspects. Affordances are centripetal because of the characteristics of the objects perceived that make it possible for an object to affect the subject. However, affordances are also centrifugal because of the protentional intention coming from the agent. Taken together, both the phenomena of temporality and affectivity show strong synergies with the notion of affordance as originally conceived.

Importantly, it will never be emphasized enough that, if not misconstrued as a mere form of introspection, phenomenological methods can provide an understanding of *subjectivity* in line with Gibson's strong commitment to anti-Cartesianism. From this phenomenological perspective, *subjectivity* is to be understood as a situated subjectivity that refers to a subject that is essentially related to the world, which, in turn, is essentially related to the subject. Thus, subjectivity, from a phenomenological perspective, is not some kind of pure interiority that might project a phenomenal world from within, but rather it connotes the perspective of a subject that is *within* the world. On the one hand, pure ecological descriptions are extremely relevant to provide descriptions of an environment that is pragmatically meaningful for the subject. Despite the scepticism of most ecological psychologists towards first-person reports, we are convinced that the two traditions can be seen as complementary to each other.⁹

⁹We would like to thank two anonymous reviewers for their comments on an earlier version of this paper.

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