Enactivism, the Field of Affordances, and Mental Disorder

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The notion of affordance is a theoretical concept introduced by Gibson (1979) that emphasizes the complementarity of the animal and the environment. To make sense of the relational nature of affordances and the way in which they cut across the subjective–objective dichotomy, some theorists have looked to enactivism. While Gibson's formulation treats perception as central, enactivism turns the focus to agency, lived experience, and the issue of what determines whether an affordance solicits action. Once we turn the focus to solicitations, we see that an object invites action not just because of its features and what abilities the animal possesses, but also because of that animal's particular goals, concerns, and sociocultural context. Affordances are not simply perceived via the sensory organs, but rather disclosed as relevant, live options. I will argue that this occurs by way of an affective framing process. Taken together, these notions of solicitation and affective framing offer a useful way for enactivists to build upon Gibson's notion of affordance in a way that (a) acknowledges the crucial affective aspect of an agent's engagement with action-possibilities, (b) clarifies the sociocultural dimension of affordances and the central role played by shared expectations, social norms, and conventions, and (c) helps to make sense of Gibson's claim that affordances cut across the subjective–objective divide. The emerging account of affordances, interpreted from the standpoint of enactivism, allows us to conceptualize what it means to engage in adaptive agency and paves the way for increased understanding of disruptions to agency in mental disorder.

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The notion of affordance is a theoretical concept introduced by J.J. Gibson (1979) that emphasizes the complementarity of the animal and the environment and the link between perception and action. What the environment affords are "what it *offers* the animal, what it *provides* or *furnishes*, either for good or ill" (p. 237). Gibson maintained that what makes items in the environment affordances is a set of real or objective properties of the affordance bearer (the object) and the organism. An object is graspable by virtue of its physical properties together

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with an animal's bodily structure and ability to grasp that object. Thus, the environment dynamically offers various possibilities for interaction and engagement (Chemero, 2009; Gibson, 1979), but only in relation to an organism with particular capacities. The living organism is inseparable from its environment, and both perception and action are relational. Gibson's account of affordances has generated much debate concerning their ontological status and the fact that they "[cut] across the dichotomy of subjective–objective" (Gibson, 1977, pp. 69–70). Are affordances real, and do they exist apart from the animals that perceive them? How are we to interpret Gibson's (1979) claim that the concept of affordance "implies the complementarity of the animal and environment"? He writes:

> the affordance does not change as the need of the observer changes. The observer may or may not perceive or attend to the affordance according to his needs, but the affordance, being invariant, is always there to be perceived. (pp. 138–139)

According to Gibson, although affordances are action-relevant properties of the environment defined in relation to an animal's capabilities, they exist independently of those animals' needs and intentions.

To make sense of the relational nature of affordances and the way in which they cut across the subjective–objective dichotomy, some theorists have looked to enactivism. Enactivism emphasizes that meaning is constituted dynamically via a living animal's ongoing, active, embodied engagement with the environment (Di Paolo, 2005; Thompson, 2007). According to Varela, Thompson, and Rosch (1991), the various forms of cognition emerge as a result of coupled interactions between an organism with specific sensorimotor capacities and the environmental features to which it is sensitive. The sort of bodily intelligence and "informational sensitivity" (Hutto and Myin, 2012) highlighted by some enactivists fits well with ecological psychology's non-representational view of perception and the notion that perception does not require internal mental states to be matched with some pre-existing external state of affairs. Instead, perception is relational, dynamic, organism-centered, and goal-directed. Many enactivist theorists also look to phenomenology for guidance: lived experience tells us that perception and action are deeply interrelated, that a central function of perception is to control action, and that action serves to guide perception. Someone's bodily capacities, previous responses, and habitual modes of relating to the environment allow for an embodied know-how that is crucial for perceiving and engaging with affordances for future actions (Brancazio, 2019).

Both ecological psychology and enactivism emphasize that perception and action are inseparable; but while Gibson's ecological account treats perception as central, some enactivist theorists have turned the primary focus to agency, lived experience, and the question of which factors shape whether an available affordance *solicits* action. Once we turn the focus to *solicitations*, we see that an object

invites action not just because of what it is and what abilities the animal possesses, but also because of that animal's particular goals, concerns, and sociocultural context. It also becomes apparent that affordances are not simply perceived via the sensory organs, but rather disclosed as relevant, live options; I will argue that this occurs by way of an *affective framing process*. Taken together, these notions of solicitation and affective framing offer a useful way for enactivists to build upon Gibson's notion of affordance in a way that (a) acknowledges the crucial affective aspect of an agent's engagement with action-possibilities, (b) clarifies the sociocultural dimension of affordances and the central role played by shared expectations, social norms, and conventions, and (c) helps to make sense of Gibson's claim that affordances cut across the subjective–objective divide.

I begin with a description of the ecological approach to affordance perception. Then, I consider how some enactivist accounts switch the primary focus from perception to action, and also place more emphasis on the process whereby affordances are disclosed. In the following section, I consider the sociocultural dimension of affordances and the role of expectations. Finally, I discuss how the emerging account of affordances, interpreted from the standpoint of enactivism, allows us to conceptualize what it means to engage in adaptive agency and paves the way for increased understanding of disruptions to agency in mental disorder.

Ecological Psychology and Affordance Perception

One crucial empirical hypothesis associated with ecological psychology, Scarantino (2003) points out, is that affordances are perceivable. Indeed, the very title of Gibson's book (*The Ecological Approach to Visual Perception*) makes it clear that his primary focus is on sensory perception. For Gibson, perception is a matter of picking up information for the purposes of behavioral discrimination and action. Picking up information, in turn, is a matter of becoming attuned to invariants and disturbances by way of the senses. The key tenets of ecological psychology are that perception is direct, active, and action-oriented. Perception is direct in the sense that it consists of the unmediated, non-representational detection of information. This information is presented in the form of patterns in the ambient energy array of the perceiver, in particular, the ambient optic array. The ecological approach holds that these patterns correspond reliably with properties of the environment, so that animals can perceive the environment directly by way of detecting such patterns. Because informational patterns are not always readily available for detection, the animal must actively explore its surroundings and adjust its relationship to the environment in order to gain access to the required information. Acts of perception whereby an animal actively obtains relevant information involve dynamic sensorimotor activity of the whole body, and not just the sensory organs. The primary goal is not the construction of internal images of the surrounding world, but rather the perception of opportunities

for action and interaction (i.e., *affordances*). Ramstead, Veissiere, and Kirmayer (2016) rightly note that these central themes from ecological psychology echo some of the key insights of Heidegger, Merleau–Ponty, and other theorists from the phenomenological tradition: "cognitive agents experience the world perceptually through the mediation of action, as a function of those actions that things in the world afford" (p. 4).

One of the central debates surrounding affordance perception is whether perceptual information and affordances exist apart from perceivers. According to Jones (2003), to say that perception is direct is to suppose "that objects and events have inherent meaning, which is detected and exploited by the animal without mental calculation" (p. 107). However, Segundo–Ortin, Heras–Escribano, and Raja (2019) maintain that perceptual information is "meaningful for an organism, not meaningful per se," and this is because "the affordances a particular informational variable specifies depend on the conjunction of the agent and the physical properties of the environment" (p. 1016). Because they have different body features and capabilities, different animals will perceive different affordances while detecting the same information. As Richardson, Fajen, Shockley, Riley, and Turvey (2008) put it, "meaning can be understood and studied as an objective and real property of an O-E system" (p. 168). Along somewhat similar lines, some enactivist theorists have stressed that although the world and its objective properties would continue to exist if living organisms were absent, *environments* would not continue to exist. What Varela, Thompson, and Rosch (1991) term the "environment" is the world as we experience it, as three-dimensional, macroscopic, colored, and so-on. This is not the world composed of subatomic particles (see p. 52), but rather a lived domain of relatively stable objects, events, and processes (as recognized by particular organisms). These theorists deny that elements of the lived world exist independently of cognition, going so far as to say that "the individuation of objects, properties, and events appears to vary according to the task at hand" (p. 148). Now, it does appear that "organisms perceive and behave in a world of objects measured in the scale of their body sizes and engage in activities occurring at the temporal scale of biological processes" (Scarantino, 2003, p. 950). But does this mean that macroscopic objects and their affordances do not exist apart from perceivers?

This raises a question about how to make sense of Gibson's claim that affordances are properties of the environment that are somehow relative to an animal. Gibson asserts that "an affordance is neither an objective property nor a subjective property; or it is both, if you like" (1979, p. 129). He further suggests that an affordance is "both physical and psychical," and that it points both to the environment and to the observer; thus, an affordance concerns both properties of the animal and properties of the environment taken in reference to each other. According to Chemero (2003), Gibson's description "makes affordances seem like impossible, ghostly entities that no respectable scientist" or analytic philosopher could include in their ontology (p. 182). Chemero wishes to sidestep the debate about

whether affordances, understood as animal-relative properties of the environment, exist without animals. This is because he rejects the premise that affordances are animal-relative *properties*; according to Chemero, affordances are not best understood as properties at all, but rather as "relations between particular aspects of animals and particular aspects of situations" (2003, p. 184). In an effort to make affordances more ontologically respectable while still doing justice to Gibson's original formulation, he describes these relations as both real and perceivable.

According to Chemero's proposed account, affordances are features of whole situations, and perceiving affordances is a matter of placing features or "seeing that a situation allows a certain activity" (p. 187). If the "affords-X" relation holds between environment and organism, this means that the environment affords behavior X to the organism. While an affordance is not a "thing," it exists and is quite perceivable. The aspect of animals that determines what the environment affords, according to Chemero, is their abilities. However, what an animal perceives, in typical cases, is the *affordance relation* rather than its ability or the environmental feature. Chemero acknowledges that if affordances are relations between the abilities of an animal and some feature of a situation, they are not easily localizable in a physical sense, but they nonetheless are perfectly real and perfectly perceivable. Here he builds upon Gibson's (1979) description of a "niche" as a set of affordances for a particular animal. According to Chemero, a niche is delineated partly on the basis of an organism's "nested structure" of interconnected abilities (p. 192). The world shows itself in the guise of a particular niche, as divided into regions, objects, and affordances, in accordance with an animal's bodily abilities. Thus, different animals with different abilities may be physically co-located but have non-overlapping niches. A human and a bacterium, for example, may share a physical location, but their niches will not overlap (p. 191).

Chemero (2003) further maintains that a feature of a situation might exist just as it is even if there are no animals around; so long as some animal exists with the appropriate ability (even if it's nowhere in the vicinity), that feature affords X: "affordances do not disappear when there is no local animal to perceive and take advantage of them" (p. 193). Because affordances are not figments of the imagination of those who perceive them, ecological psychology is not a form of idealism. Chemero's interpretation does seem to correspond with Gibson's (1979) claim that "the affordance of something does not change as the need of the observer changes. The observer may or may not attend to the affordance according to his needs, but the affordance, being invariant, is always there to be perceived" (pp. 138–139). On this interpretation of affordances, stairs are climbable relative to an organism independently of whether they are perceptually experienced as such, and also whether, once perceived, climb-ability is attended to by the organism (Scarantino, 2003, p. 951).

Building on Chemero's account and highlighting the sociocultural dimension of affordances, Rietveld and Kiverstein (2014) define affordances as "relations

between aspects of a material environment and abilities available in a form of life" (p. 335). The *form of life* of a particular kind of animal consists of its relatively stable and regular ways of doing things. In the case of human beings, this form of life encompasses not only embodied abilities and skills, but also customary behaviors and common practices. Rietveld and Kiverstein maintain that the existence of affordances does not depend on a particular subject's actual engagement with affordances; rather, affordances exist relative to a form of life. So long as there exists a community with a postal system, that is, a community with the relevant abilities and standing practices (see Gibson, 1979, pp. 138–139), a postbox affords letter-mailing. Of, course, it is part of the structure of the postbox that makes it the case that it affords letter-mailing, just as it is part of the material structure of the chair that makes it the case that the chair affords sitting for someone with the appropriate ability. The key point is that the postbox affords letter-mailing and the chair affords sitting whether or not anybody happens to be using them at a particular time. Affordances have "a reality that is independent from any individual animal's actual engagement with them here and now" (Rietveld and Kiverstein, 2014, p. 337).

To make sense of how affordances cut across the subjective–objective dichotomy, Baggs and Chemero (2019) distinguish between the physical world, a habitat, and an *umwelt*. The affordances of the physical world exist independently of perceivers and are not specified in relation to any particular organism, whereas the affordances of a habitat are resources that are typical for a specific species (a form of life). Finally, the affordances of an *umwelt* are specified in more-fine-grained terms, in relation to an individual organism's unique abilities. Gibson highlights this when he says that action-possibilities are possibilities for specific agents with specific bodily capacities; for an agent without hands, a door handle does not afford grasping.

But do abilities alone carve out a human animal's *umwelt*? Rietveld and Kiverstein (2014) rightly note that some affordances that the environment offers will be irrelevant to a particular agent because they have no bearing on that subject's goals. There is an important distinction to be made between available action-possibilities and the smaller subset of affordances that become relevant from the standpoint of a particular agent. Which of the many affordances a subject is responsive to in a particular situation (i.e., what invites, repels, or attracts this individual, and thereby solicits action) depends partly on her unique goals, concerns, needs, interests, and preferences (de Haan, Rietveld, Stokhof, and Denys, 2013, p. 7). If so, then even if affordances exist independently of any animal's actual engagement and do not change as the need of the observer changes (Gibson, 1979, p. 138), solicitations inevitably are subject-dependent. I will argue that this focus on solicitations paves the way for an account of adaptive agency that emphasizes the affective, sociocultural, and normative dimensions of affordances and helps us to make sense of the disruptions to agency that occur in cases of mental disorder.

Enactivism, Agency, and Solicitations

Ecological psychology and enactivism alike have investigated the relation-ship between perception and action. However, while Gibson's ecological account treats perception as central, some enactivists have turned the primary focus to agency; and while the ecological approach focuses on visual perceptual experience, enactivism takes into account the visceral and affective dimensions of a subject's experience of affordances. In part, this is because enactivism emphasizes that affor-dances are not relative to the animal as a mere perceiver or observer; rather they are relative to the animal as an agent (Costall, 2012, p. 88) with specific needs and concerns. When an agent explores the environment, the information and affor-dances she detects are apprehended in relation to her goals and interests. Thus, many available affordances will not be seen or apprehended fully because they are irrelevant to the agent and do not relate to her specific goals or concerns. As a result, many of the wide range of behavioral possibilities that the environment offers will lack a "demand character." Some earlier Gestalt psychologists (Koffka, 1935; Lewin, 1936) have noted that the demand character of something in the envi-ronment is bestowed upon it in experience, according to the need of the observer.

Along these lines, Rietveld and Kiverstein (2014) distinguish between a land-scape of affordances and a field of affordances. While the *landscape* (or "total ensemble") of affordances is comprised of the entire set of affordances that are available to a particular agent in a given environment at a specific time, the *field* of affordances consists of the relevant possibilities for action that a particular individual is responsive to in a concrete situation). The landscape of affordances corresponds to an "ecological niche"; these are possibilities for action that are understood in relation to (i) the abilities of a particular kind of animal and (ii) the structure of the material or physical environment. Arguably, this landscape of affordances exists independently of whether a particular animal is engaging with these action-possibilities in the here and now. The field of affordances, in contrast, is defined in relation to a particular animal and can be understood as the "situation-specific, individual 'excerpt' of the general landscape of affordances" (de Haan et al., 2013, p. 7). This is the smaller subset of affordances offered by the envi-ronment that stands out as relevant for a particular agent in a specific situation.

Withagen, de Poel, Araújo, and Pepping (2012) rightly note that "the environ-ment is not a neutral manifold of action possibilities the agent simply chooses from; rather, the environment can invite a certain action or even urge a person to do something" (p. 253). For an affordance to have relevance is for it to invite or solicit the subject and beckon certain forms of perceptual–emotional appraisal and bodily engagement (Ramstead et al., 2016, pp. 4-5). Rietveld and Kiverstein (2014) maintain that an affordance becomes a solicitation "when it is relevant to our dynamically changing concerns," takes on a demand character, and becomes manifest at the bodily level in a state of "action readiness" (p. 342). Along similar

lines, Gallagher describes a solicitation as "an affordance that draws an agent to action due to its relevance, or the way that it stands out in the perceptual field" (2018, p. 722). This focus on solicitations is consistent with some enactivist theorists' emphasis on phenomenology, and "on the point of the view of the organism itself, understood as an intentional center of meaningful behavior" (Ramstead et al., 2016, p. 3). Solicitations *do* change as the needs and interests of an agent change, and thus they are clearly subject-dependent (Dings, 2018, p. 684). Among the subjective factors that constitute an agent's field of affordances are that agent's body scheme, concerns, habits (Weichold, 2018), and past experience (Rietveld, 2012, p. 213).

Introducing the notion of solicitations turns the focus of the discussion to an individual animal's actual engagement with affordances here and now. Whether affordances solicit action is a thoroughly dynamic process, with objects becoming more or less soliciting over the course of a day. This is because "different objects offer possibilities to act, but some of them are more inviting than others" (Dings, 2018, p. 683) at different times. When someone is focused on one particular course of action, it is likely that other available affordances remain in the periphery of one's awareness as potential solicitors of action. This raises an important question about "what makes it the case that a skilled individual is solicited by one affordance rather than another" at a particular moment in time. Since subjects encounter an environment "overflowing with affordances," they need some way of singling out just those ones that are relevant to their interests, preferences, and needs (Rietveld and Kiverstein, 2014, p. 340–341). Rietveld and Kiverstein point to the way in which an agent becomes increasingly sensitive to the specific demands of a given situation and to the success of her own performance. But just how do agents gauge which affordances are relevant and become attuned to the demands of concrete situations in the here and now?

Ramstead et al. (2016) note that the world we inhabit is "disclosed as a matrix of differentially salient affordances with their own structure or configuration"; a particular animal encounters this broad ensemble of affordances and evaluates them, "often implicitly and automatically," for relevance (p. 4). The notion that demand character is spontaneously *bestowed* or *disclosed* points to a pre-reflective interpretive activity on the part of the animal as agent. Remember that a key claim made by many affordance theorists, including Gibson, is that we are perceptually sensitive to affordances, so that we see a chair's property of being sit-able or a set of stairs as being climb-able. But it seems clear that affordance-detection and the selection of one action-possibility rather than others goes beyond sensory perception, where perception is understood as picking up information for the purposes of behavioral discrimination (Scarantino, 2003, p. 953). An agent could perceive invariants and disturbances in the optic or acoustic array in just the way that Gibson describes, but it would mean little for the animal as agent unless these affordances were somehow deemed *relevant*. As agent-dependent properties,

solicitations are not simply perceived, but rather *appraised*. For example, we do not simply see a chair as sit-able, but rather gauge or appraise its sit-ability as relevant in our current situation, given our concerns and interests. Such appraisal often is not deliberate or explicitly attended to, but rather more spontaneous, intuitive, and pre-reflective.

In addition, as several enactivist theorists have highlighted, it seems clear that the invitational or demand character of particular affordances (namely, those which solicit action) has an affective dimension. Along these lines, Ramstead et al. (2016) maintain that the affordances that are relevant solicit the animal by "beckoning certain forms of perceptual–emotional appraisal and readiness to act" (pp. 4–5). Likewise, Rietveld (2012) states that "the phenomenon of being attracted or drawn by a solicitation can be understood as an emotional perturbation" (p. 213). Those affordances which become relevant are those with affective significance, and the way in which things appear significant to a particular agent has much to do with her concerns and interests. A specific action-possibility "solicits action (i.e. calls me to act) only when I am responsive to act (i.e., concerned)" [Dings, 2018, p. 687]. A pizza affords eating, but only draws me to act when I am hungry or when I have desire for pizza. A shoe affords throwing, but only draws me to act when I am feeling angry. This suggests, once again, that affordances are not simply perceived via the senses; rather, they are gauged or selectively attended to, and this process of selective attention relies heavily on affectivity. A subject's affective attunement to a particular situation, informed by her concerns and interests, helps to determine which available affordances solicit action.

To make sense of how this sort of selective attention works, we need not appeal to mental representations or propositional content. Instead, it appears that human agents possess some kind of pre-theoretical, non-intellectual understanding of where to direct their attention in a given context, which is built up through learning and mediated by past experience. As subjects navigate through the world, they do not sequentially process all the information that is potentially available to them, but instead focus on certain very specific things rather than others. Affect operates as the "allure" of consciousness and implies a "dynamic gestalt or figure–ground structure" whereby some objects emerge into affective prominence, while others become unnoticeable (Thompson, 2007, p. 374). What I call *affective framing* is a spontaneous, pre-reflective, bodily way of filtering and selecting information in accordance with what matters to us. While the prefrontal lobe no doubt plays a crucial role, the provision of affective and motivational color or tone to events and situations is not simply a neural achievement. The affective dimension of selective attention involves bodily arousal and bodily feelings, which are best understood as distributed over a complex network of neurobiological processes, including metabolic systems, endocrine responses, musculoskeletal changes, and cardiovascular responses; and its framing dimension involves discernment and the highlighting of particular features as salient.

Crucially, these dimensions are inseparable and interdependent. When a subject enacts a fear-frame regarding driving in the snow, for example, her bodily sensitivity consists in various changes in heart rate, blood pressure, hormones, skin temperature, and the orientation and positioning of body parts; and the framing dimension has to do with appraisal and the apprehension of relevance and significance. The subject's framing of her surroundings in this particular way (i.e., as dangerous) is partially constituted by her undergoing various bodily changes and associated feelings; and these bodily feelings, in turn, are partly a matter of her framing her surroundings in that particular way. These affective frames also are enacted partly by way of the subject's facial expressions, gestures, posture, movements, and overall bodily comportment; associated bodily feelings help to determine the focus of both action and perception by highlighting considerations with *felt importance*. As a result, the very way in which the world is disclosed to the subject, including what she attends to in perception, and what she strives for in action, are shaped and contoured by bodily feelings of caring.

This basic mode of pre-reflective attention undergirds sense perception and plays a crucial role in gauging the relevance of environmental stimuli. At the moment when she sees a face, for example, a subject frames that face as friendly or hostile, and this value-apprehension is bound up with bodily feeling and an affective response (Schlimme, 2013, p. 107). The subject experiences whatever object she encounters as having a particular quality, and the selection of that particular quality (rather than another) is guided and prescribed by that subject's specific pre-reflective interests and concerns. An affective frame thereby operates as an affective mode of presentation "whereby significant events or states of affairs [are] disclosed through diffuse, holistic bodily feelings" (Slaby, 2008, p. 437); a particular bodily condition is lived through in the very process of gauging the relevance of things in one's environment. Such framing determines a subject's attentive focus, right down to the most fine-grained levels, and thereby fixes precisely which features of the surrounding world become salient for her. Some affordances emerge into affective prominence, while others become unnoticeable, and this allows the agent to become attuned to the action-possibilities that matter to her. If subjects did not rely on affective framing, they would be faced with a potentially endless array of possible behavioral options.

Accounting for affordance "perception" in terms of affective framing helps to make sense of how the demand character of an affordance is bestowed and highlights that this disclosure process is fundamentally affective. In addition, the notion of framing helps to capture the sense in which affordances cut across the subjective–objective dichotomy. Affordances always are disclosed (affectively framed) from the standpoint of a particular perspective, and yet they are a function of objective features of the world and of the animal. Which action-possibilities are framed as live options is partly a function of what exists in the world and what an agent's bodily structure and capacities actually are, and also partly

a function of what matters to her. This means that even if Gibson is correct that action-possibilities exist apart from perceivers, a perceiving and acting subject is needed in order for an affordance to invite or solicit action; and for an available affordance to invite or solicit action, the perceiving and acting subject must affectively frame that action-possibility as relevant and important. Thus, the notion of affective framing helps to make sense of how invitations and solicitations cut across the dichotomy of the subjective–objective and depend on the relation between the environment and the agent (Withagen et al., 2012, p. 255).

Interests, Sociocultural Factors, and Adaptive Engagement

In the previous section, I argued that it is not just an agent's bodily capacities or skills that determine which affordances become solicitations. Among the key factors that contribute to the soliciting nature of affordances are an agent's concerns, needs, and desires (de Haan et al., 2013; Rietveld and Kiverstein, 2014). Specific affordances are disclosed as solicitations against the backdrop of an agent's enduring concerns and overall perspective. In this section, I argue that other crucial factors that contribute to the soliciting nature of an affordance include sociocultural context, the situatedness and history of the agent (Dings, 2018), and sociocultural norms and expectations. That is, what a human animal frames as an action invitation depends, in part, on social norms, standard practices, and customs shared among members of the social community. Relatively stable patterns of activity manifest in the regularities of interaction exhibited by members of a social group; everyday artifacts are used in common ways and demand to be used in similar ways in the future. Moreover, there are numerous cases in which an object affords a particular action only because the perceiver is immersed in a specific sociocultural context. The richer the form of life, the wider the range of affordances available in a particular niche. Agents become habituated to framing some affordances as relevant and dismissing others as irrelevant, and there often are complex social norms and rules that shape someone's perception of affordances. This focusing of attention and responsiveness should be understood as a matter of forming affective framing patterns, which occurs in part via both implicit and explicit training. We learn that chairs are for sitting without formal instruction, whereas we need specialized training to learn what is afforded by laboratory equipment. For a skillful agent, the subset of relevant affordances will not just be perceived, but also experienced as solicitations (Rietveld and Kiverstein, 2014) and affectively framed as inviting, live options. For example, someone who is skilled at cooking not only will apprehend the affordances of various objects in the kitchen, but also be more likely to experience these action-possibilities as solicitations.

Building on these ideas, Ramstead and colleagues (2016) introduce an expanded concept of affordance that applies to sociocultural forms of life. What they call

"natural affordances" are possibilities for action that depend on an agent leveraging reliable correlations in the environment with its set of abilities; and what they call "conventional affordances" are possibilities for action, the engagement of which depends on an agent skillfully leveraging explicit or implicit expectations, norms, conventions, and cooperative social practices (p. 2). Along similar lines, what Costall (2012) calls "canonical affordances" encompass the sociocultural significance and meaning of things and are part of what might be called wider "standing practices." Successful engagement with these affordances requires that agents correctly infer the cultural expectations associated with a particular setting. Affordances are prescriptive in the sense that "they specify the kinds of action and perception that are available, situationally appropriate, and, in the case of social niches, expected by others" (Ramstead et al., 2016, p. 5). As a result, there emerge "conventional solicitations," i.e., affordances that customarily invite or demand action given prevailing norms and expectations. By virtue of being embedded in a particular sociocultural context, humans develop unique embodied skills and practices, in part by way of what Gibson (1979) calls the "education of attention" (p. 254). Skilled practitioners selectively introduce novices to affordances offered by particular aspects of the environment, and caregivers help children to learn what to notice and how to engage effectively with their surroundings (Rietveld and Kiverstein, 2014, p. 331). When a child uses her fork and spoon as toys rather than eating utensils, she will be corrected and perhaps shown how to use them "properly."

Thus, which affordances become solicitations depends partly on the surrounding environment, partly on a particular agent's skills, needs, and concerns, and partly on cultural norms and expectations. Human conventions and shared expectations solicit certain kinds of action and modulate the specific kinds of worldly engagement that are effective in a given community. Social institutions and culture thereby not only provide a rich landscape of affordances, but also call forth or solicit specific sorts of action and create particular "paths of least resistance." Van Dijk and Rietveld (2017) present the example of being seated in a "silence area" in a train, so that talking is not really an option; nor is drinking from the bottle of water that belongs to one's neighbor. Being optimally responsive to the "whole socially significant situation" that one inhabits includes being responsive both to opportunities for action offered by the material environment as well as to opportunities for social engagement offered by other people. This requires that one act in accordance with shared sociocultural practices. Thus, while talking loudly in a "silence area" is an action-possibility, it is highly unlikely that it will become a solicitation. Particular social settings solicit specific forms of activity (e.g., raising one's hand during the question and answer segment of a philosophy talk) that may very well not be demanded in other contexts.

Such observations also highlight the fact that in addition to object affordances, there are *social affordance*s, "namely possibilities for social interaction offered by an environment: a friend's sad face invites comforting behavior, a person waiting

for a coffee machine or smiling can afford a conversation, and an extended hand affords a handshake" (Rietveld, 2012, p. 208). In social settings, there typically is a rich set of rules and expectations governing how to interact with other people and take advantage of relevant opportunities for social interaction. Social roles then can be understood as a set of interlocking habits of engagement that form and develop against the backdrop of particular sociocultural contexts and supply a specific set of motor affordances, social affordances, and solicitations. To be a "good student," a "successful account executive," or a "responsible citizen," there are a range of attitudes and behaviors that one is expected to display. People who inhabit a particular sociocultural context generally acquire a particular style of engaging with available affordances through repeated action and without conscious reflection.

This focus on solicitations also highlights the normative dimension of affordances. All possible affordances are situated in a particular sociomaterial context, and social norms render some action-possibilities appropriate and others inappropriate. What it means to engage adaptively with affordances is to be solicited *appropriately*. However, the normative dimension of "conventional affordances" is much more obvious than the normative dimension of "natural affordances." A stone has a great diversity of affordances; while artifacts such as chairs have affordances that are largely socioculturally defined, stones do not. Chairs are for sitting on, while the affordances of stones are more open-ended. However, once we shift the focus to solicitations, we see that even the affordances of things like stones and sticks have an affective, social, and normative dimension. Given the specific context and the overarching concerns of the agent, some engagements with affordances will be adaptive and others will be maladaptive. While a chair is for sitting on in a conventional sense, it also can solicit standing upon (in the event that an agent wishes to change a light bulb). In this specific situation, standing upon the chair counts as effective engagement with available affordances. In contrast, if a stone solicits throwing and thereby functions as a missile during a faculty meeting, this clearly violates shared norms and expectations. Which action-possibilities are taken advantage of, and whether this engagement qualifies as adaptive or maladaptive, almost always is a function of sociocultural norms. Thus, just as the meaning of artifacts must be understood within a wider social framework (Costall, 2012), so, too, the meaning of a stone is the function of a particular sociocultural context.

Moreover, it is misleading to suppose, as Costall (2012) does, that "canonical affordances" take on an entirely "objectivated" or "impersonal" status. According to Costall, chairs are for sitting on, even if someone happens to be standing on it to change a light bulb: "one sits on chairs" (p. 90), and thus, the meaning of a chair has become objectified and normative. However, if we switch our focus to solicitations, it becomes easy to imagine scenarios in which chairs solicit standing on, piling clothes on top of, or door-stopping. There are instances in which

objects invite or demand that we engage with them in unconventional ways; and engaging with them in these ways surely is appropriate and adaptive. This suggests that all affordances have a fundamentally "open" and relational status and that which particular action-possibilities are taken advantage of has much to do with situational demands as well as an agent's particular needs and goals. What is more, adaptive agency sometimes requires tapping into the non-standard uses of "canonical affordances"; after all, there are instances in which non-standard action-possibilities turn out to be especially relevant and creativity is needed in order to fare well in one's surroundings.

I have argued that affective framing allows for selective attention and enables a subject to appraise the relevance of available affordances. Ordinarily, as we encounter the world, we gauge things as important or significant to us in relation to open possibilities, upcoming items of interest, or our goals for the future. The way a subject affectively frames her environment, which is a function of her embodied abilities and interests, together with her unique history and the sociocultural context she inhabits, allows her to selectively notice particular features of her surroundings and thereby become attuned to relevant action-possibilities. This account builds upon Rietveld's (2012) characterization of the normative aspect of engagement with affordances in terms of embodied know-how and skill (p. 214). That is, "acting appropriately requires that a complex and particular situational context is taken into account by the individual's motor intentional activity" (p. 215) so that the agent moves toward "optimal grip" on the situation. This is a matter of being appropriately responsive to available affordances, being able to switch from one sort of activity to another as events unfold over time, being open to engagement with previously unexplored affordances, and being able to modify built-up patterns of engagement. Adaptive agency then "can be understood as an agent's having a grip on a rich, dynamic, and varied field of relevant affordances" (Ramírez–Vizcaya and Froese, 2019, p. 8); it involves "a constant on-going sensorimotor loop of perceiving invitations for action, acting on them, perceiving new invitations, and so on" (Weichold, 2018, p. 772). What it means to attain optimal grip is specified partly in relation to the demands of the environment, and also partly in relation to the cares and interests of the agent. A shift in affective framing can recalibrate the field of affordances and lend salience and relevance to particular action-possibilities that previously were unimportant. Rietveld (2012) rightly notes that "this process of being responsive to relevant affordances is inseparable from the individual's concernfulness" (p. 219).

Thus, as noted already, this "showing up" of relevance is not simply a matter of sensory perception. Instead, my proposed account of solicitations suggests that the process whereby affordances are disclosed as relevant or inviting is a matter of framing. Indeed, the idea that there are persisting habits of interpretation, built up via learning and experience and grounded in our interests and concerns, points to the crucial role of affective framing patterns. These affective frames have been

shaped by a subject's past learning and experience and help to determine "what shows up as relevant for him and her in this specific situation" (Rietveld, 2012, p. 219). Affective framing thereby allows for fluid and flexible agency and underlies what Krueger (2009) calls an "ethos of expertise." Appealing to the Daoist notion of wu-wei (naturalness) and John Dewey's conception of "know-how," Krueger describes the "ethos of expertise" as an affective, skill-based capacity that enables subjects to navigate various domains. For example, the skilled swimmer coordinates her strokes with the flow of the water "through a deep ecological sensitivity — a felt union between body and environment" (2009, p. 35). This sort of bodily intelligence involves a feeling of contextual familiarity and a prereflective sense of one's own body as the "possessor of certain capacities for action" (Krueger, 2009, p. 40). Affective framing allows one to gauge what sorts of movements a situation calls for given one's interests and existing sociocultural norms, and to carry out fine-grained adjustments to one's bodily activity in an effort to advance one's goals. Adaptive agency then can be understood as immediate organismic responsiveness to the relevance of various situational factors and the ability to take advantage of relevant action-possibilities.

An appeal to the notions of solicitation and affective framing can help us begin to distinguish between "adaptive" and "maladaptive" patterns of agency. Adaptive interaction with the environment requires manipulating or modifying existing affordances, creating new ones, and being able to gauge which possibilities are relevant given one's desires, needs, and situational factors. And what it means to be solicited appropriately by available affordances depends, in part, on the context, sociocultural norms, and someone's social role. For those operating within a social practice, "certain models of expectancy come to be established, and the patterns, which over time emerge from these practices, guide perception as well as action" (Roepstorff, Niewöhner, and Beck, 2010, p. 1056). Expectations differ depending on whether someone is enacting the role of a professor, colleague, or friend, and in order to be successful in navigating the cultural world and participate in coordinated social interaction and institutional routines, individual agents need to develop *a feel for the game*. Becoming attuned to the environment and receptive to relevant action-possibilities (by way of affective framing) has to do with improving one's situation; and because we are essentially social creatures who depend on cooperative practices to achieve our goals, and also yearn for acceptance and human connection, it is inevitable that the views of others will have significant impact.

Disruptions to Agency in Mental Disorder

Building upon the account developed in previous sections, I argue that many mental disorders centrally involve some sort of disruption to agency and that such disruptions are fruitfully understood in terms of a diminished ability to engage

effectively with available affordances. However, the difficulty is not simply that someone's sense organs are malfunctioning, rendering them unable to "perceive" objects as issuing demands. Rather, the agent faces challenges with respect to gauging the relevance of available affordances and being solicited appropriately. I have argued that apprehending relevance centrally involves a process of appraisal that is informed by agent's goals, interests, situational factors, and existing sociocultural norms. Ongoing appraisal, by way of affective framing, allows an agent to take advantage of relevant action-possibilities, modifying her behavior and shifting her patterns of involvement in light of her situation. Being optimally responsive to the "whole socially significant situation" includes being responsive both to opportunities for action offered by the material environment as well as to opportunities for social engagement offered by other people. A subject who engages inappropriately in a recurrent, patterned manner fails to gauge relevant action-possibilities and exhibits behavior that is insufficiently grounded in her situation (de Haan, 2017).

Here I wish to expand upon the work of other theorists who have utilized the notion of affordance to shed light on the dynamics of various mental disorders. Gallagher (2018), for example, characterizes depression in terms of changes in the affordance space. An affordance space, as he understands it, is defined by evolution and bodily structure (e.g., the fact that an agent has hands), development (e.g., the agent's life-stage, and whether he or she is an infant or an adult), and social and cultural practices (including normative constraints). Gallagher says that the affordance space also is defined by the subject's experience, as well as skill level and education. While a cliff affords cliff-climbing for me even though I lack the sensorimotor skills and capacities needed to carry out this activity, cliff-climbing is not part of my particular affordance space. In the case of depression, there are changes in a subject's affordance space. Because drive, impulse, and appetite are reduced or lost, many action-possibilities are closed off. Likewise, in cases of schizophrenic delusion, affordances change: a chair might appear not as something to sit in, but rather as a "thing" that has lost its name, function, and meaning. And in the case of OCD, "there is a serious constriction of the affordance space as the subject finds herself limited to one repetitive action, or one set of specific actions, and unable to move beyond that" (p. 723). Presented with a hammer, the subject is unable to refrain from picking it up and using it. According to Gallagher, "particular types of psychiatric disorder reorient or reorganize concerns, interests, and abilities, and thereby change what counts as an agent's affordances or solicitations" (p. 725). Similarly, in their description of changes in someone's physical–mental–affective health, Ramstead et al. (2016) suggest that adjustments across the affordance space can resculpt "a field of solicitations out of the total landscape of available affordances," dynamically moving the organism toward transformations in what counts as an optimal grip in a particular situation (p. 13).

It is clear, then, that when researchers try to make use of the affordance concept in understanding psychopathology, they typically are interested in *relevant*

affordances (i.e., solicitations or invitations). For an affordance to be experienced as relevant, it needs to entail a degree of self-referentiality (Dings, 2020, p. 60). That is, its relevance says something not only about the possibility for action, but also about the subject to whom it is relevant. Here Dings points to recent work by Glas (2019), which highlights how affective experiences always tell us something about both (a) the situation that elicited the experience and (b) the subject having the experience. An account of affordances that accommodates this self-referentiality would be beneficial for psychiatry since self-referentiality is important in the context of mental illness (p. 60), where what is at stake is a person with a certain history, dreams, social roles, narratives, and values. In my view, the notion of affective framing captures this broad self-referentiality; the idea is that we selectively attend to some available affordances but not others due to our cares, concerns, and interests. Some of these concerns are diachronic and pertain to ongoing projects, commitments, and long-term goals, whereas others pertain to shorter-term interests. In cases of mental illness, there are disruptions in how things are disclosed as relevant, by way of affective framing, and because such framing is a function of the subject's cares and concerns and her sense of who she is, these alterations typically also involve modifications to self-experience.

I argue that what goes awry in cases of mental illness is not that action-possibilities are actually absent or closed off. For the subject with depression, for example, the laptop continues to afford writing, and for the subject with schizophrenia who has lost her grip on the meaning of things, chairs continue to afford sitting. That is, given the objective properties of the chair and actual bodily structure and capacities of the agent, sitting on the chair remains an action-possibility; however, it is not disclosed or affectively framed as such. The central difficulty concerns the affordance space and the subject's ability to gauge the relevance and demand character of available action-possibilities. Relying on the distinction between a field and a landscape, one might say that it's the field of affordances which is constricted in cases of depression; action-possibilities are actually there, but they are not framed as possibilities or do not solicit or invite action in the usual ways. As a result, the opportunities that would otherwise be presented are experienced as closed-off "or perhaps seen as impossibly difficult" (Smith, 2013, p. 624).

Indeed, the various symptoms of depression can be understood in terms of an apparent shrinking of the affordance field, which involves three key dimensions (de Haan et al., 2013):

1. "Width" of the field refers to the broadness of the scope of affordances that a subject perceives, which relates to her having a choice or action options.
2. "Depth" of the field refers to the temporal aspect: the subject not only perceives affordances that are immediately present here and now, but also is pre-reflectively aware of future plans and action possibilities.

3. "Height" of the affordances in the field refers to the relevance or importance of the affordances that one is responsive to, i.e., "the expe rienced solicitation or affective allure" (p. 7), and relates to salience and motivation.

Subjects with depression encounter a shrinking or flattening of all three dimensions of this field of affordances. First, the "width" of the field shrinks, which corresponds to an apparent decrease in relevant action possibilities or options, and a corresponding narrowing of solicitations. Many action-possibilities are there and could be acted upon given the subject's physical abilities, but the subject does not affectively frame them as relevant options; there is a sense in which she simply does not "see" them as possibilities. This narrowness concerns the disclosure of both motor affordances and social affordances, making it difficult for a subject with depression to satisfy social expectations or fulfill demands associated with various social roles. Second, the "depth" of the field shrinks, which corresponds to a shrinking of the temporal horizon and an inability to envision the future or imagine one's life otherwise. Future action-possibilities are not "seen" (framed) as relevant and live options that invite or demand engagement. Third, the "height" of the affordances in the field flattens, so that "nothing stands out anymore" (de Haan et al., 2013, p. 8) and no single action-possibility is more or less inviting than any other. This makes it difficult for her to adjust her actions so that they are more in line with situational demands, and "this difficulty in adjusting and attuning typically results in overly rigid patterns of interaction" (de Haan, 2017). As a result, the subject with depression becomes "stuck" (Maiese, 2018), in a sense, in maladaptive patterns of behavior and response, and the capacity for fluid and flexible engagement within a particular context diminishes. The subject may remain stuck in bed, for example, and find it difficult to fulfill her work obligations. Note, though, the landscape of affordances remains far more open than it may appear; in truth, there are all sorts of action-possibilities open to the subject, given her abilities and objective features of the environment. However, because the subject is less responsive to motor affordances and social affordances, many available action-possibilities do not become solicitations in the usual way and she does not behave "appropriately."

Another way in which engagement with affordances can be pathological relates to a solicitation's "mineness," i.e., "the extent to which an affordance is experienced as being close to 'who I am or,' more precisely, 'who I take myself to be'" (Dings, 2018, p. 691.) While Dings maintains that this sense of "mineness" is connected to the fact that the experienced solicitation fits into a subject's psychobiography or personal narrative, I believe that we also have a pre-reflective, pre-narrative sense of whether a solicitation is consistent with who we are. Via my account of affective framing, I have argued that our concerns and interests form a backdrop for sense perception and our appraisal of significance. Our various enduring projects,

commitments, and "diachronic concerns" (Dings, 2020, p. 63) involve built-up patterns of bodily responsiveness and habits of attention that help to shape which action-possibilities are disclosed as relevant. A solicitation that springs up out of the blue and seems to be in tension with the affective framings that comprise an agent's enduring cares and diachronic concerns may not be highly reflective of who she is. As a result, she may feel alienated from ensuing action or experience a lack of control.

This occurs, for example, in cases of obsessive–compulsive disorder (OCD). Solicitations spring up that do not mesh with the subject's broader framework of goals and interests, which undermines the unity and coherence of agency. This is related to the fact that while solicitations ordinarily involve invitations to act, they may sometimes force agents to act. Dings writes that "in terms of bodily readiness to act, force may be experienced as more or less immediate responsiveness" (2018, p. 690). That is, a solicitation's demand character can become so strong that it functions as an overwhelming urge that overrides an agent's well-considered judgments or is inconsistent with her overarching concerns and interests. In addition, these characteristic behavior patterns may very well overrule or inhibit the expression of other situationally relevant actions, so that subjects with OCD find it increasingly difficult to regulate their engagement with the environment and gauge the relevance of available options. This makes it difficult for them to act in ways that fit with a sociocultural practice or answer to the demands of the particular situation in which the activity unfolds (Rietveld and Kiverstein, 2014, p. 333). Their "improper" conduct may very well alienate them from others, disrupt their capacity for social engagement, and make it difficult for them to fulfill expectations associated with various social roles.

Disruptions to agency also can occur in the event that subjects are solicited by irrelevant affordances (Rietveld, 2012, p. 219). For example, consider the language disturbances sometimes found among subjects with schizophrenia. The ability to speak a sequence of words in a sentence is made possible by the ability to inhibit possible associations for each separate word. In order to inhibit the production of "irrelevant" words in their speech, subjects must have some way of gauging which possible words are relevant given the situation at hand and what they wish to communicate. However, because subjects with schizophrenia are deficient in these inhibition mechanisms and find it difficult to focus their attention on relevant contextual features, they are highly susceptible to word associations that are not relevant to the case at hand. Consider the following example from Saks (2007): "I'm just kidding around…. Kidding has to do with sheep. I'm sheepish. Have you ever killed anyone? I've killed lots of people with my thoughts" (p. 215). In this example, single elements of language lose their function as carriers of intentional meaning and stand out separately from the background (Fuchs and Rohricht, 2017, p. 132) of affective framing. These examples of so-called "word salad" are evidence of disruptions to selective attention that make it difficult for

subjects with schizophrenia to gauge the relevance of speech affordances and communicate effectively with their interlocutors. In such cases, both relevant and irrelevant affordances are of the same "height" and none stand out as especially salient. As result, the subject is solicited to speak by language affordances that are not relevant given her interests, the surrounding context, and existing sociocultural norms. Due to her inability to gauge relevant speech affordances, a subject with schizophrenia may retreat into her own world; this further detracts from her ability to engage effectively with social affordances and behave "appropriately."

Difficulties with gauging relevance also can be found in cases of Attention Deficit Hyperactivity Disorder (ADHD). Subjects with ADHD exhibit difficulties with the regulation of action and the execution of cross-temporal tasks that require the sequencing and monitoring of complex behaviors. Many of them report being aware of a need to do a particular task, but say that they "just don't feel like it," and may find it incredibly difficult to get started on tasks that they do not find intrinsically appealing. They may encounter difficulties with respect to generating and sustaining motivation, procrastinating, and prioritizing tasks. This suggests that relevant affordances lack a demand character and do not solicit action appropriately. However, there is also evidence of disruptions to the individual's ability to gauge relevance. In order to maintain effective attention, subjects must be able to select which of the countless internal and external stimuli are most important, screen out distractors, and shift their focus of attention in order to attend to other relevant stimuli. Subjects with ADHD have difficulty screening out distracting stimuli and have a tendency to focus on unimportant aspects of their surroundings; they also have a tendency to become "hyperfocused" on things they are interested in, which leads them to ignore or lose track of other relevant considerations. In addition, they tend to make seemingly impulsive choices that are governed entirely by immediate concerns rather than long-term goals; their behavior is much more shaped by immediate circumstances.

Ordinarily, affective framing assigns weights and priorities so that we may filter information and sequence activities according to their importance. It serves as a sort of caring-contoured "map" that steers us where we want to go, so that we can "stop" and "go" appropriately, and so that motivation can be harnessed in support of a cross-temporal behavioral task. I hypothesize that when affective framing becomes attenuated, individuals find it difficult to detect salience and engage with relevant afordances; immediate context does more of the framing. As a result, they find it difficult to stay on task without constantly weighing alternative action-possibilities, deal with interruptions, and modify their engagement with available affordances in light of feedback. It is not surprising, then, that children with ADHD frequently fail to engage "properly" with available affordances or participate effectively in social interaction. This makes it difficult for them to satisfy the expectations of their parents, teachers, and peers and may result in problems at school.

Conclusion

One of the continuing debates surrounding the affordances is whether affordances exist apart from perceivers. I have argued that even if affordances are subject-independent, solicitations clearly depend on the abilities, concerns, and interests of the perceiver. What is more, because solicitations centrally involve the capacity for gauging relevance, we need to move beyond sense perception to understand the workings of affordance engagement. By way of affective framing, subjects are able to "see" which of the available action-possibilities are relevant to them, given their particular goals and concerns. My proposed account emphasizes that bodily feelings of caring are central to the recognition of action-possibilities and the demand character of solicitations. Indeed, the notion of affective framing highlights the fundamentally affective nature of the process whereby the relevance of an affordance is bestowed or disclosed. In addition, the notion of framing captures the idea that we don't simply see affordances with our eyes or other sensory organs, but rather "enact" our action-possibilities. Since how something is framed is partly a matter of what objectively exists, and also partly a matter of how a subject makes sense of what is objectively the case, in accordance with what matters to her, this notion of affective framing can help to clarify Gibson's claim concerning the ontological status of affordances (and the key idea that they cut across the objective–subjective divide).

Lastly, this account helps to make sense of both the sociocultural and normative dimensions of such enactments. What objects or other people afford has much to do with shared expectations, social norms, and conventions. Adaptive agency requires that subjects take advantage of available affordances in ways that answer to their goals while also conforming to social expectations. In many instances of mental disorder, a disruption to affective framing makes it difficult for a subject to gauge relevance and take advantage of relevant motor and social affordances. As a result, they are not solicited appropriately and are unable to gain "optimal grip" on the action-possibilities available within their particular sociocultural setting.

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