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Can affordances be reasons?

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ABSTRACT

We discuss whether affordances can be reasons, against the background of two interlocked considerations: (1) While the problematic degree of idealization in accounts of reasons that treat them as mental states speaks in favor of the alternative view which treats them as facts , a cognitive consideration relationship is still required to account for the motivating role of reasons. (2) While recent enactive accounts of cognition hold promise to avoid over-intellectualization of acting for reasons, these are so far either underdeveloped or treat reasons as mental states after all . Considering affordances as reasons promises to strengthen the enactivist project. We first motivate factualism about reasons, then introduce enactivism and finally discuss whether affordances can play the three roles of explanatory, justifying and motivating reasons. Since we do not take this discussion to be exhaustive but rather as outlining a research program, we point to desiderata for further work.

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The question this paper intends to explore – whether affordances can be reasons – is motivated by two sets of considerations: a problematic degree of idealization in what we may call traditional accounts of reasons on the one hand, and a lack of theorizing in alternative theories that carry some promise to replace over-idealized accounts with more realistic accounts.

When we talk about reasons for action, we can mean different things: roughly, an *explanatory reason* is a reason that explains why someone does something, a *motivating reason* is a reason for which someone does something, and a *justifying reason* is a reason for someone to do something, independently of whether they act *for* that reason (cf. Alvarez, 2010, p. 36). On a view we may call *psychologism*, most famously associated with Davidson (1980), explanatory and motivating reasons are mental states, more specifically, belief-desire pairs. On this view, the reason for my heading toward the fridge is the combination of my

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desire for a drink and my belief that I will find a drink in the fridge. According to an alternative view we may call *factualism*, proposed e.g., by Alvarez (2010), Dancy (2000), Glock (2009) and others, reasons are facts rather than mental states. The fact that there is something to drink in the fridge is a reason for me to head toward the fridge. The traditional threefold ontological differentiation of explanatory, normative and motivating reasons is then replaced by a unified account of reasons as facts which can play these three different roles, namely the explanatory, normative or motivating role. However, while these two approaches to reasons disagree on what reasons are ontologically, they usually share the idea which mental or cognitive attitudes are necessary to have a motivating reason.[1] While this is inbuilt into psychologism via the theory's ontology of reasons, it must be added to factualism. Typically, this cognitive relation is spelled out in terms of explicit endorsement (Arruda & Povinelli, 2018). This has some intuitive plausibility, because (human) agents can generally answer the question why they acted by mentioning the respective reasons that motivated them. However, many instances of human agency that we intuitively want to capture as cases of acting for a reason cannot be analyzed in terms of explicit endorsement. Moreover, the problem becomes even more severe once we consider that even in those cases where we account for our own actions in terms of beliefs and desires (explicit endorsement), a rich amount of empirical evidence supports the view that these are better seen as post-hoc rationalizations rather than the real causes that drove our actions (Kahnemann, 2011; Kornblith, 1999; Mercier & Sperber, 2011).

The second set of considerations prompting the main question of this paper is the debate about the explanatory purchase, advantages, and limitations of non-representationalist accounts of mental phenomena, such as those of ecological psychology (Chemero, 2009; Gibson, 1979; Rietveld & Kiverstein, 2014) and enactivism (DiPaolo et al., 2017; Gallagher, 2005, 2017; Hutto & Myin, 2013, 2017; Noë, 2004, 2009; Thompson, 2007; Varela et al., 1991). Enactivists, for example, emphasize that all cognitive operations must be explained by considering the dynamics between brain, body, and environment. Rather than focusing solely on the brain as realization base of mental states, the proper unit of cognition is the whole embodied agent embedded in their environment. Enactivists also reject any appeal to "mental representations" in explanations of cognitive phenomena. Their positive alternatives to representationalism are often explicitly motivated by ideas from ecological psychology. According to Gallagher (2017, p. 7), the notions of "sensorimotor contingencies and environmental affordances take over the work that had been attributed to neural computations and mental representations". Agents are characterized as being "coupled" to their environment in dynamic ways which results in "affordances", i.e.,

opportunities for action (Gibson, 1979), given the specific features of both embodied agent and environmental situation.

Thus, action plays an indispensable and central role in such enactive accounts, which makes these theories promising candidates for delivering less idealized theories of acting for reasons. But surprisingly, enactive analyses of action do not mention or provide elaborate accounts of reasons for action (see, e.g., the monographs by Gallagher, 2005, 2017, 2019; Hutto & Myin, 2013; Hutto & Myin, 2017; Noë, 2004, 2009; Thompson, 2007), with the exception of Hutto (2008) who considers reasons for action in a rather traditional way, as a "complex state of mind, minimally consisting of a belief/desire pair with interlocking contents" (Hutto, 2008, p. 26). Since this view obviously faces the same problems as traditional psychologism, the question arises what could replace Hutto's Davidsonian concept of a reason for action to strengthen the enactivist project? More generally, can we find ideas in either ecological psychology or enactivism to provide an alternative to this intellectualist position? This question prompts the turn to the notion of affordances and the question whether they can play the three roles of reasons, thus providing a simpler, less intellectualist picture of the mind.

The paper is structured as follows. In the next section we review the arguments in favor of understanding reasons as facts, rather than as mental states, and while we take factualism to be superior, we spell out two severe problems for these views (Section 2). However, while traditional factualist accounts suffer from the same (or similar) problems as psychologist views of reasons, understanding reasons as facts allows us to formulate the mental or cognitive requirement for facts to count as motivating reasons in a way that circumvents the problems of a more traditional understanding. Section 3 introduces the bare bones of the enactive account of cognition, including the use of the notion of an affordance as an opportunity for action which enactivists borrow from ecological psychology. In Section 4 we then outline how it might be possible to conceive of affordances as reasons, explore whether they might be able to play the three roles associated with reasons, and point to open questions that should be addressed in future work. This discussion is complex because different understandings of affordances (as properties, relations, or dispositions) combine with different understandings of the notion of facts. It may well turn out that on certain understandings of the notion, affordances cannot be facts and thus reasons. But like reasons, affordances are person-relative, and like facts, they are objective rather than subjective (like mental states). It is crucial to acknowledge that affordances are properties not of an environment or object in isolation, but always relative to some agent, i.e., properties of an agent-environment system. Consequently, a view on which facts are exemplifications of properties can at least pave the way to a consideration of affordances as reasons. But this may not be everyone's favorite notion of a fact. Therefore, this

paper can be seen as outlining a small research program rather than providing a full-fledged argument for a specifically strong claim.

2. Reasons

Let's start with an instructive illustration by Daniel Dennett. In his book *From Bacteria to Bach and back*, he writes:

> *[T]he biosphere is utterly saturated with design, with purpose, with reasons*. Evolutionary processes brought purposes and reasons into existence the same way they brought color vision (and hence colors) into existence: gradually. If we understand the way our human world of reasons grew out of a simpler world where there were no reasons, we will see that purposes and reasons are as real as colors, as real as life. (Dennett, 2017, pp. 37–38)

The (for our purposes relevant) difference between reasons and colors is, according to Dennett, that "reason-appreciation did *not* coevolve with reasons the way color vision coevolved with color. Reason-appreciation is a later, more advanced product of evolution than reasons" (Dennett, 2017, p. 40). Bacteria, sponges, and plants do things for reasons, Dennett argues, but they don't *have* those reasons; they do not *endorse* those reasons. There are reasons "why trees spread their branches, but they are not in any strong sense the tree's reasons" (Dennett, 2017, p. 51). We also find this difference in the animal kingdom. There are reasons for the structure and shape of a termite castle, but the termites do not represent or endorse them in the construction of the structure. By contrast, there are reasons why an architect like Gaudí constructed *La Sagrada Familia* the way he did, but these were empathically *his* reasons, the reasons he endorsed and represented. This difference is usually referred to as the difference between explanatory and motivating reasons. Moreover, we can think of reasons in yet another way, not as accounting for actual behavior in the sense of *explaining* it (as explanatory or motivating reasons), but in the sense of evaluating it: the reason that motivated us to act can be evaluated as good or bad (which of course requires us to specify the normative background with reference to which an action is good or bad, see section 4.4).

Dennett's distinction points to a contested point in the debate on reasons for action, namely the question whether they are outside or inside the mind. Are reasons worldly entities or mental entities? There is wide agreement that *normative* reasons are not mental entities: whether I have a good reason to act in a certain way (i.e., whether this action is morally demanded or in accordance with, say, my long-term goals) does not depend on me considering that reason. But what about explanatory and motivating reasons? Saying that the world is full of reasons suggests the former; saying that acting in the light of reasons involves *having* a reason or *representing* it

points to the latter. Both positions – that reasons are facts and that reasons are mental states – have been defended vigorously by philosophers. We will now introduce both positions briefly and argue that the argumentative support for the factualist view is stronger. Characterizing reasons as facts rather than mental states, however, leaves open the question what it means for someone to *have* a reason. We will address this question in Section 4.

2.1. Psychologism vs. factualism

In the tradition associated with Davidson (1980), both motivating and explanatory reasons are conceived of as mental states, more specifically, belief-desire pairs analyzed as propositional attitudes. This is partly motivated by Davidson's argument for the claim that the reasons for which we act are (or should be identified with) the causes (or causal conditions) of our actions. However, while Davidson understood explanatory and motivating reasons as mental states, he thought of normative (or justifying) reasons as more objective and less mind-dependent, i.e., as facts. Normative (or justifying) reasons are reasons that speak in favor of an action according to some norm, principle, or code that prescribes action (Alvarez, 2016). An agent need not be aware or endorse that reason for it to be a justifying reason. There can be an objective reason that speaks in favor of an action, but which the agent fails to notice or consider. For instance, it may be a good idea (you may have a justifying reason) to use your telephone joker to call an old friend who is a geologist when a geology question is asked on "Who wants to be a millionaire?", but the agent may fail to think of this person at that moment. One consequence of this view is that there are different ontological *kinds* of reasons: while normative reasons are facts, explanatory and motivating reasons are mental states.

Alvarez (2010, pp. 45–47) challenges both core assumptions of this psychologism, the assumption that there are different ontological kinds of reasons (mental states and facts) and the identification of explanatory reasons with motivating reasons. Firstly, she argues that different reasons (i.e., motivating, explanatory, and justifying reasons) do not belong to different ontological categories. Rather, there is only one kind of reason.

> I shall call a reason that there is for someone to do something a "justifying reason"; a reason for which someone actually does something a "motivating reason"; and a reason that explains why someone does something an "explanatory reason". Of course, [. . .] one and the same reason can play all three roles: it can be the reason that there is for a person to φ, it can be the person's reason for φ-ing, and it can be the reason that explains her φ-ing (and indeed other things) (Alvarez, 2010, p. 36).

The crucial point here is that one and the same reason can potentially play all three roles: when a doctor asks Mathilde to fast for twenty-four hours

because she is having an operation on the next day, then that reason *justifies* Mathilde's fasting for twenty-four hours. If she did as she was told that same reason also *motivated* her to fast; and finally, it *explains* why she turned down an invitation to dinner on that day. But if one and the same reason can be either motivating, explanatory, or justifying, a difference in *kind* is problematic. Alvarez (2010) and Dancy (2000) argue that a difference in *kind* would then imply a mysterious ontological shift (from fact to mental state) in one and the same entity. Glock expresses a similar worry, emphasizing that the idea of normative reasons depends in part on an agents' ability to be motivated by these reasons (at least under ideal circumstances). However, he argues, "if the 'motivating' reasons for which people act and the 'justifying' reasons they have for acting belonged to distinct ontological categories, agents could not possibly act for [the same; T.S & T.S.] reason there is for them to act, which is absurd" (Glock, 2009, p. 241).

This problematic ontological pluralism has convinced many philosophers to reject psychologism (Dancy, 2000; Glock, 2009; Alvarez, 2010, pp. 32ff): If reasons should only belong to one ontological category it should clearly be facts rather than mental states, according to Alvarez. After all, even Davidson conceded that *justifying* reasons are in many instances not mental states but facts (but see Mackie, 1977 for a different view).

Moreover, the initial plausibility of understanding motivating and explanatory reasons as mental states can be explained away quite convincingly. First, we can think of motivating reasons as only one special case of explanatory reasons. In many cases we explain behavior in terms of reasons that in no way motivated the agent to act. For instance, the reason that *explains* why Albert did not go to the faculty meeting may be that he forgot about it. But that he forgot about it is not a reason that *motivated* him to not join the faculty meeting. Once we enlarge the category of explanatory reasons to include, but go beyond motivating reasons, many things that are clearly not mental states count as explanatory reasons. Still, in some cases the reason that explains an action *may also be* the reason that motivated the agent to act, and in these cases reason-explanations refer to beliefs and desires. However, in the explanatory case, this does not undermine the claim that reasons are facts – one can think of them as facts about the psychology of a third person whose actions we want to explain. And even the motivating case, which may trigger the strongest intuitions in favor of psychologism, does not undermine the position that reasons are facts. Motivating reasons are usually construed as *reasons in the light of which* an agent performs an action. As Alvarez argues, an agent who acts in the light of a reason p does not act in the light of the reason "that I believe p to be the case" but rather in the light of the reason "that p". Moreover, to desire arguably *is* to be motivated. But then the desire cannot be what motivates

you, it cannot be a motivating reason. Consequently, something else must play that role, something that is not a mental state. In other words, the intuition that motivating reasons must be mental states may be due to an ambiguity inherent to talk about motivating reasons as beliefs and desires: such talk could either refer to the *act* of believing and desiring (psychologism) or to *what* is believed or desired (factualism). It is in the second of these senses, Alvarez argues, that we should understand motivating reasons. Thus, reasons are facts and one and the same reason can play all three respective roles.[2]

2.2. A challenge for factualism

Importantly, however, factualists cannot stop here. There are many facts and factualists have to say something about what makes a fact a reason. More precisely, they must spell out the conditions under which a fact counts as an explanatory, a motivating, or a normative reason. One general feature which we will return to in the following sections, is that although reasons are facts and thus objective, they are *person-relative* facts. All reasons for φ-ing are reasons for *someone* to φ. The fact that p may be a reason for Adam to φ, but not for Bertha. The fact that Peter is ill may be a reason for Adam to visit him (since he is Adam's friend) but not for Bertha (since she does not know him). That one can go skiing in Austria will be a reason for enthusiasts of that sport to go there but not for those who don't enjoy skiing. That is, there is a subjective element in reason-talk even once we subscribe to factualism.

Moreover, while factualists do not have to account for different ontological kinds of reasons, they still must retain a psychological element from psychologism. As we saw in Dennett's distinction, it is one thing to say that there are reasons for some agent´s behavior, and quite another to say that the reason was, in any meaningful sense, the agent´s reason. What's added here is the psychological act of *reason-appreciation* that comes into play when a fact is supposed to play the action-motivating role. This act is not required for facts playing the *explanatory* or *justifying* (normative) role of a reason. But for a reason to play a *motivating role* (i.e., for it to be *the agent´s reason*), the agent must stand in some peculiar relation to the reason. Interestingly, this is usually spelled out in terms of explicit endorsement, again mental states like beliefs and desires. Thus, while psychologists and factualists disagree about the ontological status of reasons, they seem to agree about the psychological make-up required by an agent to have motivating reasons: beliefs and desires or explicit endorsement. The only difference here seems to be whether these states are part of the reason itself, or whether they are a necessary requirement external to the reason to turn a fact into a motivating reason.

This, however, is problematic as well. Arruda and Povinelli (2018) argue that explicit endorsement leaves out many cases of agency that we intuitively understand as examples of acting for reasons, like cases of skilled action:

> The professional soccer player does not stand in an Endorsement Relationship with her reasons for dribbling the ball to the left of the defender rather than to the right, but *she does nonetheless act for reasons* [our italics, T.S & T.S.]. She has the relevant background attitudes, perhaps in the form of habituated dispositions acquired through practice and drills, regarding how best to avoid the opposing team's defender. These attitudes provide reasons for her actions in that they are *relevant inputs* for her choice. (Arruda & Povinelli, 2018, p. 12)

Thus, according to Arruda and Povinelli, explicit endorsement as we know it from our human case may only be a very special case rather than a defining feature for what it means to have motivating reasons. Other, less sophisticated ways of relating to facts (like habituated dispositions) may suffice for these facts to become motivating reasons.

Moreover, the problem may not be confined to some special cases. A large body of research in the psychology of decision-making supports the view that what we usually take to be the reasons for our own behavior – the things we considered, the reasoning processes we went through etc. – are often mere post-hoc rationalizations rather than the real causes that drove our behavior.[3] If that is correct, however, explicit endorsement is not just not the only way in which we can relate to our motivating reasons: explicit endorsement is more the exception than the rule. Put in these terms then, the picture emerging of what it means to act *in the light of reasons* (i.e., to have motivating reasons), turns out to be a very idealized one, one that fails to capture many cases.

To be clear, this is not a problem pertaining to factualism in itself: Even if proponents of factualism usually understand the necessary psychological relationship of an agent to their motivating reasons in terms of explicit endorsement, factualism is not committed to endorsement. The problem does, however, put pressure on factualists to say more about what really is needed to turn facts into motivating reasons. And, given the arguments against over-intellectualized views of what it means to act for a reason, it prompts us to turn to other theories of mind and cognition to find a promising alternative. In the next section, we will thus consider such an alternative: enactivist theories of cognition that oppose cognitivist and representationalist accounts of the mind and promise to offer less over-intellectualized views of agency.

3. The enactive account

The enactive account of cognition belongs to a family of views that are opposed to the idea that explanations of mental phenomena must appeal to mental representations. Other views in this family are ecological views about vision and visual perception (Gibson, 1979), for example. In the recent history of cognitive science, many of the ideas from ecological psychology and enactivism have merged into hybrid views that share a general outlook while differ in the details. Given the strong explanatory ambitions of enactivism, we will focus on this family of views. Quite generally, enactivism "starts with the idea that we are action oriented" (Gallagher, 2017, p. 174). Against the cognitivist view that cognitive capacities must be explained in terms of the brain's computation of mental representations, enactivists propose that in order to explain cognition, one must take into consideration the whole embodied agent (Hutto, 2008, p. 57) and how they are embedded in and coupled to their immediate environment.[4]

In contrast to cognitivist positions, enactivists not only hold that "action-orientation shapes *most* cognitive processes; they also aim to "ground higher and more complex cognitive functions [. . .] in sensorimotor coordination and [. . .] the full body" by conceptualizing reflective thinking as "exercises of skillful know how" (Gallagher, 2017, p. 6). Two notions are central in replacing the explanatory notion of a mental representation: The first is borrowed from Gibson's (1979) ecological psychology, i.e., the notion of an "affordance" – conceived as a possibility for action emerging for the cognitive agent as a result of relating features of the environment appropriately to features of the organism in question."Affordances of the environment are what it offers the animal, what it provides or furnishes, either for good or ill" (Gibson, 1979, p. 127). Consequently, an agent is always confronted with a whole "space", "landscape" (Rietveld & Kiverstein, 2014) or range of affordances on which she can selectively act given her set of abilities. On Gallagher's view, evolution determines what kind of body you have, your developmental stage determines what skills you are already able to execute, and social and cultural practices integrate you within a larger setting with normative constraints. We will return to this below.

The second central notion in enactive accounts of cognition is "coupling", mostly left undefined, but intuitively conceivable as the appropriate integration of the cognitive agent into its environment. Agent and physical as well as social environment can form an intimate functional unit rather than remaining separate from each other. This is particularly vivid and exploited in debates on the question whether cognitive processes can sometimes extend into tools. Clark and Chalmers (1998) and Clark (2008) argue, for example, that in cases where our cognition extends into a smartphone, say, because it partially takes over the

function of memory, cognitive agent and smartphone should be viewed as *one* complex system – based on the relevant kind of coupling that exists between the two.

On enactive accounts, perception, action, and basic cognition are supposed to be explainable by relying on these notions rather than appealing to mental representations; that's a commonality with ecological accounts (Chemero, 2009, Heras-Escribano, 2019; Hutto & Myin, 2012; Hutto & Myin, 2017; Thompson, 2007). Thus, explaining cognition requires going beyond the brain by appealing to the intricate dynamics of brain, body, and world, since "on the enactivist view, the brain is not composed of computational machinery locked away inside the head, representing the external world to provide knowledge upon which we can act" (Gallagher, 2017, p. 178). In action, the brain teams up with relevant body parts to form a functional unit to properly exploit the agent's "affordance space" which is defined and determined by evolution, development, and social and cultural practice.

Despite this action-oriented understanding of cognition in general, it is surprising that the notion of a reason does not feature prominently in enactive accounts. For instance, Gallagher (2017) does not even mention reasons; neither do they have an entry in the indexes of other major contributions by Noë, Thompson, or Varela. However, Hutto (2008) provides a discussion of reasons, emphasizing their difference to beliefs, and the difference between belief attribution and reason-understanding, treating them as "logically distinct abilities" (Hutto, 2008, p. 24). Seen through the lens of folk-psychological explanation, Hutto observes a "fairly widespread tendency to conflate" understanding and attributing beliefs "with a capacity to understand and attribute reasons" because it was commonly assumed that understanding beliefs equips children already with an understanding of reasons, as documented in discussions of false-belief tests. He points to the restrictions and limitations of such tests, which can only demonstrate understanding of beliefs "*and nothing more*" (Hutto, 2008, p. 26). By contrast, when we explain someone's action in terms of reasons, we do not only appeal to beliefs, but to "a complex 'state of mind', one having a particular kind of implicit structure" (Hutto, 2008, p. 24), consisting of the complex way that "propositional attitudes interrelate". Thus, as a prerequisite for an understanding of reasons, Hutto works with a concept of reasons as belief/desire pairs (cf. Hutto, 2008, p. 26). Stressing the link of the capacities to act for and understand reasons to the capacity of language, Hutto defends such "sententionalism" as "nonnegotiable both for having and, crucially, for representing reasons" (Hutto, 2008, pp. 230–232). This implies that "a creature that is at best only capable of holophrastic 'utterances' would not be able to form intentions or to act for reasons of its own" (Hutto, 2008, p. 232).

By assuming this psychologistic notion of reasons, enactivism would inherit all the problems besetting psychologism, such as regarding the ontological status of reasons and the over-intellectualization of the constraints on having them. Thus, the question arises whether we can strengthen enactivism by exploiting the notion of affordances further since it is one of the central concepts in non-representationalist accounts anyway and investigate whether (and if so under which conditions) these can be understood as reasons. If we can demonstrate that affordances could play the three respective roles of reasons within the dynamic coupling of agent and environment, then this (a) could fill the gap in theorizing between those cases of action that are well described in terms of explicit endorsement on the one side and cases where creatures are not sophisticated enough to warrant talk of acting for (motivating) reasons; and it could (b) extend the use of (and possibly further clarify) the notion of an affordance from the viewpoint of ecological psychology. The challenge is thus to show how affordances fit into a factualist framework about reasons (Section 4.1), and to spell out the conditions under which these facts can play the explanatory, motivating, and normative role of reasons (4.2.–4.4.). Moreover, if affordances can be reasons, acting for motivating reasons might not be constrained to humans and very sophisticated animals, since affordances are meant to play an explanatory role for a wide range of creatures. This goes hand in hand with the challenge of formulating restrictions such that the account does not become overly inclusive.

4. Affordances, agency, and reasons

4.1. Affordances as objective facts

In their accounts of cognition, enactivists rely heavily on Gibson's ecological approach to perception. When enactivists claim, for example, that "experiencing organisms are set up to be set off by certain worldly offerings – that they respond to such offerings in distinctive sensorimotor ways that exhibit a certain minimal kind of directedness and phenomenality" (Hutto & Myin, 2013, p. 19), then the relevant features of the environment – the "offerings" – are what Gibson called affordances, i.e., what the environment "*offers* the animal, what it *provides* or *furnishes*, either for good or ill" (Gibson, 1979, p. 127).

Not only enactivists hijacked the notion. Ever since Gibson has coined the term, it has made something of a career even outside the psychological context. Heras-Escribano observes:

> Many disciplines and approaches within post-cognitivism and beyond ecological psychology made extensive use of affordances as a key object of study.

> Phenomenologists, enactivists, relationalists, dynamicists, all of them found in affordances a new way to emphasize the main ideas that they wanted to champion: the continuity between perception and action, a situated and embodied idea of meaning or value that was not semantic or representational, the priority of skillful and adaptive coping over abstract and intellectual processes, etc. The notion was soon applied to design or architecture, to environmental studies, robotics, and many other fields. (Heras-Escribano, 2019, pp. 3–4)

Heras-Escribano is worried about the notion becoming watered down or mysterious, and this paper may be adding to the worry if the notion is applied for too many purposes. Indeed, Gibson himself did not work out a detailed account of affordances, but instead made them look rather suspicious when he wrote that

> [an] affordance is neither an objective property nor a subjective property; or it is both if you like. [. . .] It is equally a fact of the environment and a fact of behavior. It is both physical and psychical, yet neither. An affordance points both ways, to the environment and to the observer (Gibson, 1979, p. 129).

Subsequently, various philosophers and psychologists have picked up, refined and developed the notion further. But the disagreement over what they are exactly is reason enough to investigate it further. Many of the accounts offered conceive of affordances as animal-relative *properties* of the environment, or "properties of the animal-environment system" (Stoffregen, 2003). Proponents of such views disagree over various details, such as whether affordances exist *prior* to agents in order to exert selection pressures on species (Reed, 1996), whether they are *dispositional* features of the physical environment which are in need of circumstances in which they can become manifest, such as the presence of some embodied agent or effectivity (Turvey, 1992), and whether the relevant condition for affordances to become manifest is also a corresponding dispositional property of the animal (Turvey, 1992) or simply the body scale (Heft, 1989).

Chemero (2003, 2009) fundamentally disagrees with these accounts by conceiving of affordances not as properties but as "relations between particular aspects of animals and particular aspects of situations" (Chemero, 2003, p. 184). Building on Chemero's account, Rietveld and Kiverstein (2014, p. 334) argue that the abilities of agents relative to which affordances are defined, "are generally abilities the individual has by knowing how to take part in a sociocultural practice" and must therefore be understood against a common background of "ways of doing things". Thereby, they introduce an inherently normative dimension to affordances.[5] These innovations yield their account of affordances as "relations between aspects of a material environment and abilities available in a form of life" (Rietveld & Kiverstein, 2014, p. 335), where a form of life is a notion obviously broader than an individual, but also slightly more specific than a species. Conceiving

of affordances as relations is problematic though, since relations "do not incorporate a sense of actualization, potentiality, or change" which is crucial for affordances (Heras-Escribano, 2019, p. 87). Conceiving of affordances as dispositions, by contrast, retains this character of actualization.[6]

For the purposes of this paper, we do not intend to take sides on these issues which might require a separate treatment (see Heras-Escribano, 2019, for further detailed discussion), although we are sympathetic to Heras-Escribano's dispositional account inspired by Ryle (1949). In the following, we would like to highlight characteristics of affordances that do matter to our target question. We consider it as a further task to apply the results of our discussion to the different interpretations of the notion of an affordance, over and above the general (uncontested) idea that they are opportunities for action and must be specified with respect to a certain organism or agent. While it might be reasonable to consider affordances as reasons on some interpretations, it may be problematic on others.

Since we argued above that reasons are facts, the essential question for now (if we want to find out whether affordances can be reasons) is whether affordances can be facts. The answer to this question will be complicated since both concepts (affordances and facts) allow for different interpretations, and it may not be positive for all these interpretations. As we have seen, there is a debate about whether affordances are properties, relations, or dispositions. Add several accounts of facts. Mulligan and Correia (2021) distinguish two major accounts, according to which facts can be either "exemplifications of properties" or "obtaining states of affairs". In the first instance, facts are a "sui generis type of entity" in which "objects exemplify properties or stand in relations".[7] The authors introduce the shorthand of facts as exemplifications for this view. When it comes to affordances, what's important for our purposes – in line with Gibson's initial statement, quoted above – is that features of both relata are relevant for an affordance. The agent-side variable is an ability; the environment-side variable is some environmental feature. Within the coupling-relation of agent and environment, affordances are "the glue that holds the animal and environment together"; they "arise along with the abilities of animals to perceive and take advantage of them" (Chemero, 2009, p. 146).

But "arising" here does not yield a proliferation of entities (something that Heras-Escribano is worried about). Affordances simply become visible only from a certain perspective, namely one that considers an agent-environment as one unified coupled system. For example, the property of graspability does not appear in abstraction but only with respect (or relative) to a given organism, e.g., it arises when a cup and an agent with the appropriate hands or fingers are coupled in the right way. Another way of making the same point is to say that once

agent and environment are properly viewed as one coupled system, i.e., when agent and object complement each other, the object's property (the affordance) is exemplified. That is, the affordance shows up as a property exemplified by this specific organism-environment pair. On this interpretation of fact, an affordance can count as a fact; but it only obtains partly because of properties possessed by the agent or organism. So, on an understanding of facts as exemplifications of properties, affordances seem to fare well enough. Below, we will argue that for the consideration of whether affordances can be reasons, looking at the organism-environment as one coupled system alone is insufficient, since the agent must somehow endorse (or otherwise be related to) the affordance *as* a reason for action and select it from a whole landscape of affordances.

Now, one might worry that affordances will be too subjective to count as objective facts. But even though affordances arise from the combination of agential and environmental features, they are perfectly real and objective. When Gibson quipped that they are neither subjective nor objective or both if you like, the "subjective" agential features are themselves perfectly objective and observer independent. The fact that I have two legs for standing and walking and two arms with hands to grasp things like cups is an objective fact about my bodily constitution (and, with exceptions, the "form of life" I belong to), and it matters centrally for what I can do, for the range of action opportunities that is available for me in any given environment. Rietveld and Kiverstein emphasize and defend the objective reality of affordances despite this relational character and despite their dependence on forms of life. That's because they do not depend on the existence of specific individuals, even though they depend on the existence of a form of life, co-specified with respect to an ecological niche (Rietveld & Kiverstein, 2014, p. 330). The respective agential features are also not subjective in the sense that the agent must be conscious of (possessing) them for them to yield affordances in each context. That is, their subjectivity should not be "construed in its traditional, mentalist sense", since they "do not arise as a consequence of mental operations" (Michaels, 2003, p. 136).

Note that neither is this subjectivity problematic, nor is their objectivity, since affordances "do not add more physical entities to the organism-environment system", but merely emphasize the "complementarity of organism and environment" (Heras-Escribano, 2019, p. 62). We might thus turn this alleged bug of subjectivity into a feature and focus on the person-relativity of affordances which might make them candidates for *person-relative facts*: a cup may afford grasping, but always only relative to some form of life, species or individual (depending on your favorite choice here). Just because an affordance must be specified with respect both to

objective features of the environment and idiosyncratic features of an embodied agent, it does not become subjective, but remains perfectly objective.

Thus, if reasons are facts (as factualism holds) and affordances can be considered as facts (albeit person-relative facts), affordances are at least candidates for being reasons. But whether they can be reasons depends not only on one's preferred notion of fact, but also on whether they can fulfill the further criteria that allow a fact to play one or all of the three respective roles of reasons.[8] This is the task of the following sections.[9]

4.2. Affordances as explanatory reasons

A reason is an explanatory reason when it "explains why an agent φ-ed: it makes the agent's action intelligible." That is, the reason is part of the explanans of an agent's action. Alvarez writes:

> When the reason why an agent acted is *also* a reason for which the agent acted, the explanation is what I call a "*reason* explanation proper". When an agent acts for an apparent reason, the explanation that cites this apparent reason is a "Humean explanation", which typically has the form "he φ-d because he believed that *p* and wanted *x*". (Alvarez, 2010, p. 5)

Affordances have been introduced to replace other concepts in *explanations* of cognitive phenomena. Whereas cognitivists appealed to representations and computations, ecological psychologists and enactivists appeal to coupling and affordances. Thus, if affordances can be facts, and if they have been introduced as explanatory concepts to account for behavior, it seems unproblematic to understand them as explanatory reasons. However, a couple of problems need to be addressed here.

First, one might worry that understanding affordances as reasons is overly inclusive. Against the background of the mind-life continuity thesis defended by most enactivists (e.g., Gallagher, 2017; Noë, 2009; Thompson, 2007), the behaviors of a wide variety of biological agents can be explained by appeal to affordances. This thesis holds that the formal organizational principles of cognition and mind are an enriched or more complex version of the organizational principles of life. In other words, the concept of an affordance has been introduced to account for behavior down to very simple organisms. On the low end of the spectrum, e.g., in bacteria and other single-celled organisms, both the range of sensorimotor abilities and the corresponding number of affordances will be severely limited to say the least. In many cases natural selection *programmed* these simple organisms to act on an affordance they register (or perceive?) rather automatically, with a very limited degree of flexibility.

The appeal to affordances to explain the (rather limited) behaviors even of such simple organisms might provoke skepticism: are these organisms cognitively not far too simple for explanations in terms of reasons to make sense? Here it is important to keep in mind that reasons can play different roles, and at issue here is the *explanatory* role of reasons. For a fact (e.g., an affordance) to play the explanatory role of a reason, no particular psychological equipment is required of individuals. Returning to Dennett's (2017, p. 40) example, saying that sponges, trees, or bacteria do things for reasons just means that we can *explain* their behavior in terms of reasons without implying anything about their psychological capacities. It does not presuppose what Dennett calls *reason appreciation*, a psychological condition to turn a reason for behavior into an agent's (motivating) reason. Thus, it does not seem particularly problematic to take affordances to be explanatory reasons just because this extends the scope of explanatory reasons to the behavior of very simple organisms.

Secondly, one might ask *how* affordances explain action? This question might be a bit surprising, since affordances have been introduced to play an explanatory role. However, a closer look shows that things are not that easy. The more complex an agent is, the greater its range of sensorimotor abilities because a greater range of abilities yields a richer landscape of affordances (Rietveld & Kiverstein, 2014). And a rich landscape of affordances poses a problem for any single affordance to be explanatory: saying that an organism acted in a certain way because the situation afforded this action is not much of an explanation given several alternative actions the situation afforded to the agent at the same time. A proper explanation then will have to take into account why the agent *selected* this affordance among many. One way to account for affordance selection is with reference to an agent's motivational structure. But this amounts to spelling out how affordances can be *motivating* reasons and will be discussed in the following section.

An alternative solution would be to explain affordance selection with reference to hierarchical features inherent to any landscape of affordances, ranging from – relative to the situation – completely irrelevant ones to *soliciting affordances* (Siegel, 2014) which, in a way, "pull" the action out of the agent. However, while the notion of soliciting affordances could be very helpful here, this move calls for a convincing (but still lacking) account of how they achieve this. Interestingly, since simpler organisms face a poorer landscape of affordances (with only a single affordance in the simplest case), the explanatory problem of affordances is much less pressing for simpler organisms than for more complex ones. In other words, until the problem of affordance selection has been solved, the most convincing case for affordances as playing the explanatory role of reasons are affordances of very simple creatures. A challenge though is to demarcate these cases clearly from the operation of simple biological mechanisms that are not candidates of cognitive operations at all.

In this section we discussed the prospects and challenges of understanding affordances as explanatory reasons. It is not a problem for affordances to be explanatory reasons that affordances arise for a wide range of organisms. But it turns out we need a convincing theory of affordance selection for affordances to play this role. This can either be achieved by a comprehensive theory of soliciting affordances or by shedding light on the motivational structure of the selecting agent. This will be the topic of our next section.

4.3. Affordances as motivating reasons

According to Alvarez (2010, p. 35),

> a reason is called a "motivating reason" because it is something that motivates an agent, that is, it is what he took to make his φ-ing right and hence to speak in favor of his φ-ing, and which played a role in his deciding to φ.

On the present interpretation, a motivating reason is a fact that plays the motivating role of an agent's action. It is the fact *in the light of which* an agent decides to act. In other words, while the reason itself is a fact, it must be supplemented by an enabling condition to play a motivating role; it presupposes a way of psychologically relating to that fact. According to Alvarez, this should be cashed out in terms of "considerations that could figure in premises in the practical reasoning [...] that leads to action" (Alvarez, 2016). How do affordances fare with respect to playing the motivating role of reasons?

As we have seen in the last section, the question how affordances can play a motivating role, boils down to the question how affordance selection works, for any embodied agent will always be confronted with a "rich landscape of affordances", rarely with only a single individual affordance.

As mentioned in the foregoing section, some theorists, like Rietveld & Kiverstein, refer to examples of "soliciting" affordances to solve this problem. In some situations, actions are simply *pulled out* of our body (Siegel, 2014), so to speak. They make one course of action mandatory, as Rietveld and Kiverstein (2014, pp. 341–2) argue:

> Some affordances the environment offers will be irrelevant to the agent because they have no bearing on the individual's concerns at the time. Other affordances will stand on the horizon as potentially relevant to the agent, such as the glass of water on my writing desk, which is there ready for me to take a drink when I find myself with an urge to do so. An affordance (the glass of water to drink from) becomes a solicitation when it is relevant to our dynamically changing concerns (e.g., thirst) or, more precisely, for improving one's grip on the altering situation [...] Finally there are affordances that command an agent to act on them here and now such as the door handle that invites pulling when we wish to enter a closed room. A particular affordance becomes a relevant affordance when it solicits or motivates an individual to engage with it in a way that is adequate to the situation.

This differentiation within the range of affordances is certainly right and important, but for our present purpose it does not solve our problem. First, the notion of a soliciting affordance that pulls out actions of an agent, evokes an impression of a passive agent whose behavior is merely being triggered by the relevant soliciting affordance. This might be sufficient for an affordance to be an explanatory reason (see last section), but it leaves out the psychological part needed on the side of the agent for affordances to be motivating reasons.

Moreover, this is not only a problem for affordances as motivating reasons. Rietveld and Kiverstein as well as other thinkers sympathetic to enactivism and ecological psychology seem to underestimate the challenge of explaining the selection of particular affordances in a situation only on the basis of concepts available to like-minded thinkers, like coupling or detection. By insisting on the coupled agent/environment system being the unit of explanation, they ignore the asymmetry within the coupling-relation and the resulting need for a cognitive act (Martens & Schlicht, 2017). For instance, exploiting the affordances of a US mailbox presupposes background knowledge about the mailing system, the differences between US letter boxes and US litter boxes (whose physical properties alone afford roughly the same range of actions) and their respective normative dimensions. Adequate actions in such contexts presuppose categorization of the relevant objects and representation of the respective action chains and consequences of actions (Palmer, 1999; Schlicht & Starzak, 2019).

Furthermore, the concerns which are central to the selection of affordances are typically not basic biological concerns but sociocultural. They can be religious, political, psychological etc., each of which make different conceptual and theoretical presuppositions. Given that, appealing to the differences between mere affordances and solicitations cannot be the whole explanatory story here. It is in many cases not only the world that solicits us to act: we as agents must cognitively relate in particular ways to such solicitations. This requires a focus not on the agent-environment-system (as a whole) but on the agent's cognitive relation to the environment even when they form one coupled cognitive system (although this is not something that the enactive account itself recommends, given its emphasis on the coupled system as the unit of explanation). Siegel (2014), for example, suggests that we perceptually *represent* affordances. Such representations could then yield further cognitive processing and adequate actions as responses to affordances and solicitations.[10] But positing a representational relation on this level of basic action and cognition is not an option for either fans of enactivism or ecological psychology. Thus, we must try to spell out this cognitive relation in a different way.

Anyway, arguing that an explanation of action in terms of affordances (in some cases) requires an appeal to some cognitive relation of the agent to its environment, supports the idea that affordances can be motivating reasons: facts in the light of which an agent acts. But how is this cognitive relation to be characterized? On the standard account, this has been spelled out in terms of what Arruda & Povinelli call a *consideration relationship* that involves explicit endorsement: the agent must have the "capacity to identify, consider, and endorse a consideration as her reason in question" (Arruda & Povinelli, 2018, p. 2). In other words, the standard picture requires that a) the agent be self-aware of the reason as their own reason, b) the agent understands that this reason speaks in favor of an action, and, finally, c) the reason is either the product of or can figure in the agent's deliberation (Arruda & Povinelli, 2018).

This view, however, does not sit well with the enactivist picture of cognition: explicitly endorsing a reason would constitute a case of detached deliberation rather than the kind of action orientation proponents of such views have in mind. Crucial to Rietveld & Kiverstein's account of affordances – and to Gibson's and Chemero's ecological versions – is that acting on affordances is not the result of active and reflective deliberation but of unreflective perception (Rietveld & Kiverstein, 2014, p. 341). But as we argued in Section 2 already, the standard view is spelled out in idealized terms and captures only a small subset of reason-based actions. Many actions which we intuitively want to identify as instances of agency do not meet the strong criteria of the standard view. These include cases of *fluent* agency (Railton, 2009, p. 81), merely *purposive* (or goal-directed) actions (as we also find in some non-human animals) and *skilled* actions. Thus, if we want to treat these cases as cases of agency and maintain that acting for reasons is a central criterion for agency, we must modify the standard account.

Arruda and Povinelli proposed a promising modification that leads in the right direction. They argue that there are different ways in which an agent can stand in a consideration relationship. In addition to the explicit *endorsement* relationship, they propose a *directed relationship* to capture cases of agency that cannot be accommodated by the standard account. To stand in a *directed relationship* with one's reasons, an agent must neither be aware of a reason as her own reason, nor does she have to endorse the reason explicitly. All that's needed is that the "background attitudes that could constitute reasons are her own" and that "she could pair her actions with explicit reasons for action, but she does not do so" (Arruda & Povinelli, 2018, p. 10).[11] Importantly, Arruda & Povinelli use a liberal notion of background attitudes, which include forms of habituated dispositions, acquired through practice and skills.

The problem with Arruda & Povinelli's suggestion is that they assume a psychologistic view of reasons: according to them, the *directed* relationship "only" requires that the agent, "upon articulating the background attitudes that comprise her reason [. . .], is not surprised to discover that she holds the beliefs and desires in question" (Arruda & Povinelli, 2018, p. 13). That is, the reasons that need not be endorsed explicitly in the directed relationship, are nevertheless beliefs and desires, not facts. However, their notion of a directed relationship does not really depend on the assumed psychologism in the background.

In fact, this liberal notion does sound promising if one wants to find a place for *motivating reasons* within an enactive or ecological view of agency. The psychological part in the *directed relationship* requires less intellectual sophistication and focuses on (skilled or habituated) action rather than on deliberation or other high level mental activities. This fits nicely with the view that perceiving affordances and acting on them selectively without reflection is to be understood as performing based on skillful know-how (Gallagher, 2017, p. 6) and the mastery of the normative dimension of affordances (Heras-Escribano, 2020). Moreover, allowing for background attitudes to be dispositions is consistent with the nonrepresentational explanation of cognition favored by enactivism.

Finally, while the directed relationship does not require explicit endorsement, this criterion is not overly inclusive concerning the range of organisms acting for motivating reasons. *Skillful know-how* or *habituated dispositions, acquired through practice and skills* both point to learning as an important criterion for an agent to stand in a directed relationship to their reasons (affordances). Dretske (2005) also defended learning as an essential criterion for acting for reasons, because learning requires something like an evaluative perspective on actions and outcomes. The fact that this is the agent's own perspective that leads them to repeat favorable actions and to change actions with unwelcome outcomes suggests that the agent is not only acting for a reason, but that it is *their* reason.

Let's review this section: for affordances to play the motivating role of reasons, we must account for affordance selection not in terms of soliciting affordances, but by focusing on the cognitive requirements by which agents select action possibilities from their landscape of affordances. A directed relationship which has been introduced to solve the over-intellectualization problem of the standard account can be spelled out for affordances as well in a way that fits well with nonrepresentational views. Moreover, this account suggests learning as an important requirement for organisms to count as agents that have motivating reasons. Thus, while not being overly inclusive, this account allows for a much wider range of organisms as agents that act for reasons. One open question in this context is whether every kind of learning suffices, or whether there should be more constraints on what an

organism can learn to count as an agent. Another question is whether there are further instantiations of the consideration relationship that underlie acting for reasons. This is a pressing question since further instantiations in addition to the endorsement and directed relationships would be desirable in the context of our evaluation of affordances as reasons.

4.4. Affordances as normative reasons

We say that a reason has normative force when it "can favour φ-ing, that is, it can make φ-ing right or appropriate" (Alvarez, 2010, p. 3) relative to some normative standard. Various options are available for what the relevant normative standard for reasons is. Aristotle linked "what is right to do with what is conducive to the good (whether intrinsically or instrumentally)" (Alvarez, 2016). In other words, normative reasons, on this view, are facts in virtue of which an action is good (Raz, 1999, p. 23). Another option is to link the normativity of reasons to the motivational structure of agents.[12] What we have reason to do is simply what serves best our desires, a view with roots in Hume's ideas concerning the standard for practical rationality (Hume, 1978). Or the normative standard could be construed more liberally in an instrumental way. Normative reasons are then not normative *per se*, but only with respect to some normative background that needs to be specified. Thus, an agent can have, at every moment, various conflicting normative reasons, depending on the normative standard against which these reasons will be evaluated. For instance, while an organism's motivational structure recommends action A, moral considerations may recommend action B. Moreover, this view also allows for biological views of normativity, like the one grounding Kacelnik's (2005) notion of *biological rationality*: the organism's goal of survival and its prospects of reproduction recommend action C.

Given that affordances can be motivating reasons, they should also be potential normative reasons – after all, we can ask for each reason for which an agent *does* act, whether it is a *good* reason (according to a specific normative standard). Moreover, none of the normative standards mentioned seems to pose a severe problem for affordances playing the normative role of reasons. The actions afforded to an agent in each context can be evaluated concerning all kinds of normative standards: they can contribute to the intrinsically (or morally) good or to fulfilling the agent´s desires, or they can be in accordance with any other instrumental norms.

However, the kind of normative grounding does constrain the scope of creatures that can be said to have normative reasons. We usually take humans as the only creatures whose actions it makes sense to evaluate concerning moral principles. Some non-human animals may be considered as objects that deserve our moral consideration, but not as moral subjects

that are able to think in moral terms themselves. It does not make much sense to say that a lion has a moral reason to care for its pack, or to not kill cubs. Thus, this normative background excludes all non-human organisms from having normative reasons of this kind.

For the Humean view that links normativity with the motivational structure of an organism things are not so clear which creatures qualify to have normative reasons. Ultimately it will depend on which motivational states we take to be relevant, and which organisms have these states. If preferences suffice, this normativity will be applicable to a wide range of very different animals; if desire is needed, only rather sophisticated animals will fall into that group.

Finally, the most liberal conception of normativity also has the widest scope of organisms that can be evaluated along those lines. In the case of a very simple organism, it does make sense to say that, from a biological point of view, it has a (normative) reason to act on a certain affordance rather than on some other affordance. Stating that sponges or fungi have normative reasons thus makes sense under this reading. It seems, however, that allowing biological rationality to constitute an appropriate background for the normativity of reasons implies a seemingly strange result: the simpler an organism is, the more it will tend to act in accordance with its normative reasons, since its actions will be strongly determined by natural selection.

At this point, we will end the discussion. The upshot of this section is that affordances can be normative reasons according to different evaluative standards, and the question which organisms can be said to have normative reasons depends on which standard we choose. There are many further debates on what is relevant for normative reasons, like the debate whether an agent needs to be aware of a fact for this fact to be a normative reason (between so-called *objectivists* and *perspectivists*), or whether acting for a normative reason requires sensitivity to the relevant normativity. While these matters are relevant for the question which creatures can be said to have normative reasons, they are largely independent of the question whether these reasons are affordances or other facts, and thus beyond the scope of this paper.

5. Conclusion

In this paper, we explored the possibility whether affordances can be reasons, starting from the assumption that reasons are facts. First and foremost, affordances have been introduced and later revived in attempts to provide alternative explanatory frameworks to the classical representational-computational theory of mind (Fodor, 1975). Gibson (1979) introduced them as properties emerging from the coupling of agent and environment and enactivists (Gallagher, 2005; Noë, 2004) referred them to

argue for the action-oriented character of perception and cognition. As far as we know, no enactivist has considered them as candidates for reasons for action, despite this emphasis on action-orientation. As we showed, Hutto (2008), a radical enactivist, even construed reasons in a Davidsonian tradition as mental states rather than as facts. We then explored the argumentative options and challenges arising in the attempt to spell out whether affordances can play the explanatory, motivating and justificatory role of action. While we think that we have made some headway toward a positive answer to the question in the title, the paper ends with some desiderata and tasks for future work. Specifically, we have pointed to the problem that the motivating role of reasons requires the specification of a cognitive act that turns a fact into the reason for which the agent acted. We productively used the distinction between an endorsement and a directed relationship to a reason, suggested by Arruda and Povinelli (2018), but called out the need for further refinements to capture the wide range of actions afforded to organisms. We hope that this research program is worthwhile and will engender future work by likeminded philosophers.[13]

Notes

1. This captures the difference, spelled out by Dennett (2017, p. 40) for example, between there *being* reasons for certain behaviors and agents *having* those reasons, see Section 2 below.
2. At this point, we will end the review of arguments against psychologism and in favor of factualism. While a more in-depth analysis is beyond the scope of the paper, the section was intended to motivate factualism. We will proceed under the assumption that reasons are best understood as facts rather than mental states.
3. This is the gist of the heuristics and biases program most famously represented by Kahneman and Tversky: people's decisions are influenced by many things that they are unaware of, like hunger, position and ordering effects, anchoring, mood, temperature etc (Kahnemann, 2011). Moreover, as Mercier and Sperber (2011) have argued, our reasoning skills rather serve the function to win arguments or to justify actions than to acquire true beliefs. These influences on our reasoning processes are largely opaque to us. When asked what informed their choices, people usually offer what would have been perfectly fine reasons for their behavior. For a philosophical discussion of the consequences of these influences on human reasoning see Kornblith (1999).
4. The enactive view challenges even weak representationalist accounts formulated in traditional "theory of mind"-terminology which attempt to respect the contribution of bodily factors in such understanding, since they do so by introducing "body-formatted representations" underlying our representations of the actions of others (Alsmith & de Vignemont, 2012; Goldman & de Vignemont, 2009).
5. In his critical discussion of the alleged normativity ascribed to affordances, Heras-Escribano (2019, ch. 4) emphasizes the social character of this normativity since without feedback one would never know whether they did something the right or the wrong way. He then proceeds to argue against normativity as a feature of

affordances because it included the possibility of error which the main principles of direct perception in ecological psychology do not leave room for. But the claim that perception is direct (over and above it seeming to be direct in the phenomenological sense) is very much contested given what we know from neuroscience, and it can be rejected, even if one is persuaded by other aspects of the theory of affordances. Gallagher (2008), for example, makes a case for the perception of mental states like emotions and intentions in others as being direct, but this claim only pertains to the phenomenal level of experience, rather than to the level of mechanisms underlying perceptual processing.

6. Chemero in turn argues that the agent's abilities should not be identified with dispositions, since in the right conditions, dispositions (like the solubility of sugar, say) are guaranteed to become manifest, which does not hold for abilities that have to be executed and can fail to be executed properly (if one stumbles and falls down while walking, say).
7. Note that, contrary to Heras-Escribano's (2019) concerns, such a view does not imply reductionism or physicalism. A reviewer pointed out that Heras-Escribano's arguments are problematic for the view that affordances are facts. But what he is concerned about is that a factualist position is reductive or physicalist in the sense that an "agent-unrelated description of reality" (Heras-Escribano, 2019, p. 70) enjoys priority or even exclusivity over alternative descriptions which acknowledge an agent's point of view, such as "ecological or agent-related" descriptions. Since factualism about reasons does not amount to reductive physicalism, Heras-Escribano's concerns do not apply to our consideration.
8. It might turn out that affordances can play the role of explanatory, but not of normative reasons, say.
9. When we now turn to a brief investigation whether affordances can play all three roles of reasons, a preliminary remark is in order. Although Alvarez (2010) has argued at length that these three roles must be kept apart, there may nevertheless be interesting relations between them. For example, "sometimes, reasons play an explanatory role because of their normative force" and thus explain why someone *ought* to act in a certain way (Alvarez, 2010, p. 28). Here explanations and norms obviously interlock. Furthermore, "a reason that explains may be a motivating reason", i.e., then "the reason why an agent acted is *also* a reason for which the agent acted" (Alvarez, 2010, p. 5). While a motivating reason can always be cited as an explanation of an action, the converse does not hold. Considering the exact relationships between the different roles of reasons is a task outside the scope of this paper. But the evaluation of affordances as candidates for reasons can very well be applied to such an investigation.
10. Millikan (2004) and Clark (1997) have proposed to capture Gibson's insights by construing representations as action-oriented. This is one possible way forward but not one available to those who eschew representations.
11. It is not entirely clear how strong we should interpret the modal condition in this statement: it is required that the agent *could* pair her actions with the relevant background attitudes.
12. The debate between internalist and externalist accounts of reasons pertains to the question whether the notion of a normative reason involves a motivational aspect. We do not delve deeper into this debate in this paper (see Finlay & Schroeder, 2017, for discussion).
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