Enactivism and Normativity
The Case of Aesthetic Gestures

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Abstract   Enactivist approaches claim that cognition arises through a dynamic interaction between an acting organism and its environment. An ongoing challenge for these approaches is the problem of accounting for normativity while avoiding overly reductionist outcomes. This article examines a few proposed solutions, including agent-environment dynamics, participatory sense-making, radical enactivism, the skilful intentionality framework, and enactivist cultural psychology. It argues that good examples of enacted normativity are gestures of appreciation/disapproval performed in the aesthetic domain. Both Wittgenstein and Dewey explore this issue and their ideas could be productively worked upon in an enactive account.

Keywords   Enactivism. Normativity. Wittgenstein. Pragmatism. Gestures.

Summary   1 Introduction. – 2 Agent-Environment Dynamics, Sense-Making, and Radical Enactivism. – 3 Situated Normativity, Skilful Intentionality, and Enactive Cultural Psychology. – 4 Aesthetic Gestures. – 5 Pragmatist Cultural Enactivism. – 6 Conclusion.

1   Introduction

Embodied, enactive, embedded, and extended approaches to cognition (4E Cognition approaches) aim to account for the mind in a naturalistic framework, privileging an anti-dualist and often anti-representationalist perspective that takes the mind to be an aspect or a part of an organism – a body – and the organism to be crucially entrenched in an environment. In this kind of framework, the interactions between the organism and the environment, and the interactions between different organisms, play a fundamental role in the development of cognition. To perceive is not merely to receive bits of information, and to know is not simply the result of performing some mental computation on the basis of that information, assembling mental representations of the external world. Rather, perceiving and knowing are activities enacted by living organisms in their environments in a continuous flux of movement, reciprocal adaptation and change. While different authors are variously committed to defending one or more of the four E's, certain basic tenets are generally shared by these approaches, most notably an anti-Cartesian attitude that resists the traditional picture of the mind as separated from (and superior to) the body.

In this paper, I will focus in particular on *enactive* approaches, by which I mean a variety of perspectives originating from Varela, Thompson and Rosch's seminal *The Embodied Mind* (1991), but also taking inspiration from and developing the notion of affordances as proposed by the ecological psychology of James J. Gibson (1979).[1] In recent years, enactivists have attempted to extend their scope: while they originally focused on basic cognitive activities and interactions, now they offer wide-ranging accounts of more articulated, complex, and 'high-level' cognition,[2] involving not only natural coping and elementary social skills but also abstract reasoning, language, responsiveness to norms and values, complex social practices, and, ultimately, culture itself. This extension can assume various shapes, both in diachronic and in synchronic terms. Diachronically, an enactivist approach can help understand the evolution of cognition from basic animal forms of life to the later stages of humankind (phylogenesis); or the development of high-level cognition in the human child (ontogenesis). Synchronically, an enactivist analysis of basic and high-level cognition can show how the two are interrelated, and this again can be done from different points of view and with dif-

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[1] For the sake of brevity, I assume the reader's familiarity with the basics of these approaches.

[2] Although I believe it is not the most felicitous, I am using the expression 'high-level' because it is widely employed in the literature.

ferent methods. There is also a methodological issue involved here. While a *scientific* approach might look for causal explanation, a *philosophical* one might aim towards conceptual clarifications (cf. Glock 2018). This paper is a *philosophical* analysis of some conceptual difficulties and impasse that enactivist approaches face in their attempt to enlarge the scope of their accounts to high-level cognition. More specifically, I will direct the attention to enactivist accounts of *normativity*, by which I mean all those phenomena of human life that involve norms and/or values, and therefore the distinction between right and wrong, correct and incorrect, especially from the point of view of ethics and aesthetics. This is admittedly a broad notion, whose meaning will become clearer as the argument proceeds. The challenge that enactivism faces in tackling normativity, as I see it, is the challenge of explaining it without explaining it *away*. Is it possible to offer a naturalistic but non-reductionist account of these phenomena, one that allows for understanding them better without reducing them to something non-normative?

In tackling this question, I will proceed as follows. In section 2, I will present some enactivist attempts of making sense of normativity – namely, agent-environment dynamics, participatory sense-making, and radical enactivism – and some criticisms that have been levelled against them. In section 3, I will move to other proposals within the enactivist family – situated normativity, skilful intentionality, and enactive cultural psychology – that are not subject to the same criticism. One of these proposals finds inspiration in some Wittgensteinian remarks on 'aesthetic reactions' and on gestures; in section 4, I will linger on these aspects, focusing on what I will call 'aesthetic gestures' as a good example of enactive normativity. This will allow for a deeper examination of the notion of normativity. In section 5, I will claim that the pragmatist tradition has good resources for developing this insight, focusing on G.H. Mead's analysis of gestures and on John Dewey's concept of 'qualitative thought'. I will conclude that a non-reductionist enactive account of normativity *is* possible under certain conditions and that aesthetic gestures are a promising object of investigation for it.

2 Agent-Environment Dynamics, Sense-Making, and Radical Enactivism

Anthony Chemero proposed a "radical embodied cognitive science" (2009) that completely does away with representation and computation; by appealing to the pragmatist/naturalist tradition of William James and John Dewey, as well as to Gibson's ecological psychology, it describes cognition in terms of agent-environment dynamics. There is a passage in Chemero's book that is particularly interesting

for our purposes. In order to understand it we need to take a step back and first have a look at the perspective that Chemero is arguing against: Mark Rowlands' theory of "representation in action" (2006). With the aim of explaining representation through action (which he sees as a variant of Wittgenstein's problem of explaining rule following through practices), Rowlands describes actions in terms of normative claims on 'tryings': an action of the type *f-ing* is such if an intentional state of the kind 'trying to *f*' precedes it. "The identity of an action", he claims, "depends on what *should* cause it, not on what merely *does* cause it" (2006, 61), and therefore a merely causal theory of action fails to accommodate its normative dimension. In order to account for this normative dimension, Rowlands proposes his Thesis of Representation in Action: some actions, that he calls *deeds*, are themselves representational and normative and there is no need to appeal to other representational or normative elements to explain them.

According to Chemero, instead, it is possible to account for the normativity in human perception and action, solving Rowlands' alleged problem, without appealing to this representational aspect. This is because *affordances* are themselves normative; indeed, they are only comprehensible "in terms of norm-laden abilities" (2006, 146 fn. 9).[3] In other words, an individual with an ability is supposed to behave in a particular way and may *fail* to do so. Differently from dispositions, that according to Chemero inevitably become manifest whenever coupled with the right enabling conditions,[4] abilities are normative. In explaining this point, Chemero affirms:

> A better way to understand abilities is as *functions*. Functions depend on an individual animal's developmental history or the evolutionary history of the species, both of which occur in the context of the environment. [...] Abilities come to play the role they do in the behavioural economy of the animal because, at some point in the past, they helped the animal (or its ancestor) to survive, reproduce, or flourish in its environment. Yet even in identical circumstances to those in which they were helpful in the past, abilities can fail to become manifest; there can, that is, be a *malfunction*. (2009, 145)

I am not sure that talk of abilities as functions, and of affordances as normative relations in virtue of that, is very helpful in solving the is-

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[3] Chemero is also reinterpreting Gibson's notion of affordances here. Originally defined as *properties of the object* that show possibilities of actions for a user, in Chemero's view they are *relationships* between the perceiver and the object (or the environment more generally).

[4] For a different, Wittgenstein-inspired account of dispositions, see Morelli 2020.

sue of normativity (I am not concerned here with the issue of representation). There is indeed a big difference between the binary success/failure, which seems appropriate for the notion of functions, and the binary correct/incorrect, which pertains to normativity (Heras-Escribano 2019, 92-3). A further problem with the concept of a function is that understanding something, such as an ability, as a function, depends on knowing what it is a function for. Indeed, a machine, typically, functions (or not), it works (or not), but it is not the machine itself, be it taken in isolation or together with its environment, that functions or not; it is us, an interpreter, that can see it as functioning or not (Boncompagni 2018a, 80; cf. Heras-Escribano 2019, 94-5). Similarly, affordances *per se* lack the criteria of correctness that would allow characterizing them as normative. It is the interpreter that enables such a characterization, by noticing what is the 'functioning' or correct way of interacting with them. It might be objected that the difference between an organism and a machine is precisely that the organism has its own survival as a sort of intrinsic goal. This is indeed a central idea in the autopoietic-enactive approach. Yet, talking of 'goals' and 'norms' here amounts to applying a misleading picture. This vocabulary belongs to another context, and it risks suggesting a host of other implications that are only appropriate of that other context.

Another way of putting the same point is by highlighting that Chemero's approach does not respond to Wittgenstein's argument against private language (Heras-Escribano, de Pinedo 2016; Heras-Escribano 2019, 93, 101-2). An action, in order to be characterized as normative, must not only satisfy a goal but also be performed under certain correctness criteria regarding the *right* way to satisfy such goal. Correctness criteria are crucially public or shared: an agent cannot distinguish between 'it is right' and 'it seems right to me' without appealing to public criteria (Wittgenstein 2009, 185-242).

This same criticism has been levelled against enactive approaches that focus on sense-making. Building on the original autopoietic-enactive theory proposed by Varela, Thompson and Rosch (1991), Di Paolo (2005) adds one element to the picture: *adaptivity*, defined as a system's capacity to regulate its states and its relation to the environment so as to respond appropriately to external perturbations, avoid risky situations, and seek preferable ones. Adaptivity goes beyond the basic 'norm' of keeping a unity going (autopoiesis), because it also accounts for an organism's preferring and seeking certain situations rather than others:

> Bacteria possessing this capability will be able to generate a normativity *within* their current set of viability conditions and *for themselves*. They will be capable of appreciating not just sugar as nutritive, but the direction where the concentration grows as

useful, and swimming in that direction as the right thing to do in some circumstances. (Di Paolo 2005, 437)

In other words, the organism is able to *evaluate* its present situation with respect to an external element that has a positive or negative valence for it ('self-monitoring'), and to act appropriately, in the way it *should* act ('appropriate regulation'). Adaptivity, according to Di Paolo, implies a form of *normativity* in the organisms that possess it, and that is why it can account for disfunctions and pathologies (2005, 440), as well as for sense-making. The organism enactively *makes sense* of elements of its surroundings in that it uncovers and at the same time constructs the *meaning* they have for it.

Expanding on this view, De Jaegher and Di Paolo (2007) propose a theory of participatory sense making as an enactive approach to social cognition. When two (or more) individuals coordinate their movements and utterances, a "regulated coupling" emerges, a new organization, that is aimed at aspects of the coupling itself, without thereby destroying the individuals (2007, 493). In this context, sense-making gets social: new domains of sense become available, that were not there for individuals alone. A further step in this line of research is the enactive investigation of language in Di Paolo, Cuffari, De Jaegher (2018), in which it becomes clearer that there are different levels of normativity involved in the enactive approach, especially when it extends to the social and cultural domains. The first two levels were already described in Di Paolo (2005): the basic biological normativity of the organism as an autonomous unity, and the normativity involved in adaptivity and sense-making. A third level is the normativity of social interactions, where the coupling between individuals has its own rules. Finally, there is the normativity of the *habitus*, that reflects sociocultural practices and language. An important aspect that the authors underline is that what is 'given' in human action and experience is "the group and community life of historical transformation of the lifeworld, with its norms, rules, institutions and relations" (Di Paolo, Cuffari, De Jaegher 2018, 136), and that this composite 'given' includes language (or 'languaging', as they put it) as a *constitutive* ingredient.[5]

Now, what looks still a bit problematic in this approach is not the use of normative categories for social interactions, culture, the *habitus*, or linguistic practices; rather, one could raise doubts concerning the employment of words and concepts related to normativity and meaning at the level of elementary organisms' adaptivity and sense-making. As Heras-Escribano, Noble and de Pinedo have underlined, "when we say that an agent (for instance, a bacterium) is searching,

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5   On language see also van den Herik 2020.

avoiding, intending or wanting we are not describing the agent, but interpreting, making sense of its behaviour" (2015, 26).[6] The 'making-sense' part is ours, the interpreters'. In other words, the risk in this approach is that it might suggest that 'high-level' normativity is *based on*, and therefore can be *explained* by reference to, 'low-level' normativity.

Hutto and Myin (2013, 2017), with their proposal of Radical Enactivist Cognition, use similar arguments to criticize what they call AAE (Autopoietic Adaptive Enactivism), that includes the above-mentioned perspectives based on sense-making. Radical enactivism defends a strong version of anti-representationalism and claims that the basic forms of experience and response to the environment are non-conceptual and contentless. In Hutto and Myin's view, the kind of intentionality that characterizes basic minds, including some forms of human cognition, is 'target-focused', but does not involve or require content; they call it 'ur-intentionality'. Ur-intentionality, or intentional directedness, has a basic normative dimension, in their view, but only in the sense that natural attunements between the organism and its environments that developed in the past structure the organism's current tendencies for response and "normatively fix what is intentionally targeted" (Hutto, Myin 2017, 116-17). Perspectives focused on sense-making are wrong, according to radical enactivists, in talking of meaning at the level of the organisms' adaptivity to the environment. It is only at a later stage and, as it happens, only in the human lineage, that special forms of sociocultural practices emerge. Only minds who have mastered these sociocultural practices can engage in content-involving cognition, and between these two stages – contentless and content-involving minds – there is a *difference in kind*, not just degree (Hutto, Myin 2017, 134).

While avoiding the vocabulary of meaning for basic minds, however, Hutto and Myin face another problem: they tend to posit a big divide between low-level and high-level cognition (Dreon 2019a). Although their recent book (2017) is explicitly aimed at somewhat bridging this gap, the insistence on basic cognition (including human basic cognition) being not only non-representational but also contentless risks overlooking how deeply even basic activities like perception itself and spontaneous reactions, *in the human context*, are imbued with culture and normativity.

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6 Colombetti (2014) too seems to be committed to this vocabulary. For a response to Heras-Escribano, Noble and de Pinedo, see Di Paolo, Cuffari, De Jaegher (2018, 34).

3 Situated Normativity, Skilful Intentionality, and Enactive Cultural Psychology

Other approaches within the enactivist/ecological family take a different road. We might say that instead of naturalizing the normative, they tend to culturalize the natural – yet, crucially, not in the sense that they (mis)apply normative concepts to basic forms of life; rather, they detect normativity in the natural, instinctive and unreflective actions and reactions that are typical of the human (or in any case of complex) form(s) of life. Instead of claiming that the normative is natural, they claim that the natural is, for humans, normative.

Erik Rietveld starts from the realization of how "amazing" it is that "even without explicit deliberation we normally act in ways that are appropriate from the point of view of sociocultural practice" (2008, 973). There are numberless episodes in which individuals act without reflection, and among those episodes are not only automatic movements triggered by physical stimuli, but also expressions and reactions that are significantly linked to skills and expertise. Rietveld makes use of the Wittgensteinian notion of "directed discontent" (Klaassen, Rietveld, Topal 2010): the fast, instinctive and at the same time evaluative reaction of appreciation or disapproval that characterizes the relationship between an artisan and its work (typically an object), manifested in one's bodily postures, gestures, and facial expressions. The object in this context represents an affordance, or better a social or a cultural affordance.[7] Directed discontent is an example of situated normativity: it depends on a complex sociocultural background going all the way down to bodily movements. It is at the same time immediate and normative, lived (bodily) and cultural (communal). Its normativity is grounded in the human form of life, in a multifarious and relatively stable set of ways of living, sociocultural practices, shared background assumptions, values, habits and customs that show common patterns as well as geographical and historical variations. Directed discontent and aesthetic reactions in general are only understandable against the background of these regular ways of doing.

Elaborating on this and drawing from ecological psychology and ethnography, Rietveld, Denys and Van Wester have developed the Skilled Intentionality Framework, where skilled intentionality is defined as "the selective engagement with multiple affordances simultaneously in a concrete situation" (Rietveld, Denys, Van Wester 2018, 41), and an affordance is defined as "a relation between (a) an aspect of the (sociomaterial) environment and (b) an ability available in a

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7 See Costall 1995, 2012; Solymosi 2013; Rietveld, Kiverstein 2014; Ramstead, Veissière, Kirmayer 2016; Carvalho 2020.

'form of life'" (45). This perspective takes fully into account the fact that human beings respond to both material affordances and social opportunities for engagement, and the two are inextricably interconnected. Whether a bottle of water solicits me to grab it and drink the water or not does not depend only on material and biological aspects, including my thirst, but also on human social norms, such as ownership for instance (Costall 1995, 473). In this view, the material and social sides of affordances are constitutively entangled (there cannot be the material without the social, or the social without the material). The human eco-niche is "sociomaterial" through and through (van Dijk, Rietveld 2017, 2): human beings show a selective openness to affordances that is "appropriate with respect to a socio-cultural practice or *form of life*" (Bruineberg, Chemero, Rietveld 2019, 5234).

A similar outlook is adopted in enactivist cultural psychology:

> A radically cultural enactivism requires more than an account of human experience that builds up from biological autonomy to society and culture. It requires us to acknowledge the irreducible normativity of everyday life and of even our most personal actions and expressions. For humans, to perceive and to act is to perceive and to act in a way that always remains sensitive to normative (hence social) correction. (Baerveldt, Verheggen 2012, 168)

Cultural enactivism avoids both deriving normativity from a biological intentionality or natural teleology and describing it in terms of the internalization of cultural models or representations. Our socialization in a cultural environment instead is thought of as involving "a historical process of continuous attunement to consensually orchestrated community practices" (Baerveldt, Verheggen 2012, 179), where training and learning techniques (as opposed to rules) assume a fundamental role. Baerveldt and Verheggen also build on Wittgenstein's notion of a form of life, describing it as "a total style of being" (2012, 183); they also talk of cultural competence as "a stylization of a total way of life" (184) and of normative dispositions as "expressive skills and styles" (185). The notion of style that is adumbrated here helps illuminate how culture has local and personal interpretations – that is, different ways of being enacted – where the very possibility of embodying and expressing a style relies on having acquired a competence or a mastery through training and corrections (cf. Milkov 2020, 511).

In sum, situated normativity, the skilled intentionality framework, and enactive cultural psychology all point towards an idea of normativity in the human form of life as embodied, enacted, and yet irreducible. Human life is normative from the start and all the way down: normativity shapes the everyday. Perception itself from this point of view is sensitive to the normative, as demonstrated by "socially de-

pendent perceptions" (Arango 2019). These are differences in perception shown by members of different social groups. For instance, patterns of eye movement differ in people from America and from China when confronted with a scene in which a background and a focal object can be distinguished. The point is that we *learn* to perceive, and socially dependent perceptions show "the enactment of culturally structured, normatively rich techniques of interaction with multi- and inter-modal perceptible materials" (Arango 2019, 39). There are cultural styles of seeing that frame what is to be considered salient in a scene, as well as what is and what is not an agreeable and harmonious relation between different colours, surfaces, or patterns. What we encounter here is the connection between perception and *aesthetics*. On this terrain, the intrinsically normative and evaluative aspect of the human form of life comes to the fore.

4 Aesthetic Gestures

Wittgenstein's notion of forms of life plays a relevant role in the perspectives just examined. I would like now to expand a bit on this legacy by focusing on Wittgenstein's remarks on gestures, and on 'aesthetic gestures' in particular.

The importance of gestures in Wittgenstein's philosophy can hardly be overestimated. An often-told story even suggests that a specific gesture had a fundamental part in the shift from his early to his later thought. According to the anecdote, Wittgenstein was travelling with the Italian economist Piero Sraffa, and presumably explaining his views, when the latter made a Neapolitan gesture "brushing the underneath of his chin with an outward sweep of the finger-tips of one hand" (Malcolm 2001, 58; Engelmann 2013, 152) – a sign meaning something like 'I don't care' – and asked Wittgenstein what was the grammar of that. Although Wittgenstein does not offer specific clues regarding the significance of this episode, remarks about gestures in general abound in his writings.

Wittgenstein's interest does not lie in gestures as the external expression of an internal idea or state of mind (though he does talk of gestures in the context of expression), or on representational gestures, i.e. bodily movements that tend to reproduce something (Alibali, Boncoddo, Hostetter 2014). One of the themes around which his remarks tend to cluster is pointing, a context in which gestures are often connected with language. In his view, however, although pointing gestures are used in language acquisition, considering gestures as 'prototypes' of language is misleading, because it oversimplifies both gestures and language (Wittgenstein 2005, 23-25; Wittgenstein 2009, §§ 1-3). One reason why is that even in this alleged elementary form, the meaning is *not* fixed by the gesture. In order to understand

a pointing gesture, we already need to know what we are supposed to focus on, which aspect of the object or scene the gesture points to. If I say 'XYZ' pointing towards a wooden black table, my interlocutor might interpret the word 'XYZ' accompanied by my gesture as referring to the table as an object, to the material (wood), or to the colour (black), or to other aspects (e.g. solidity, the shape of the table, my desire to have dinner etc.). This is another way of saying that a gesture is only a gesture if it is embedded in a normative context that clarifies how it is to be interpreted. In other words, it is true that "our language-game is an extension of primitive behavior", for "our *language-game* is behavior", or "instinct" (Wittgenstein 1981, §545),[8] but at the same time it is true that "a gesture doesn't have to be innate; it is instilled, and yet *assimilated*" (Wittgenstein 1982, §712). This is clear if we think of gestures belonging to cultures different than ours. "We [Europeans] don't understand Chinese gestures any better than Chinese sentences" (Wittgenstein 2005, 8; Wittgenstein 1981, §219), Wittgenstein observes, and we need to learn these gestures, either by being told what they mean in words, or just by growing up or being trained in that culture. Gesture is natural and cultural at the very same time.

To clarify, this is not to deny that pointing might have a special role in language acquisition or in the development of joint attention, or that it is so natural that even some non-human animals can understand it (Kita 2003). Rather, these considerations help broaden the perspective from the pointing gesture to gestures more generally and help see how much the naturality of gestures is already a cultural or normative naturality. Gestures in the aesthetic domain further illustrate the point.

Recall Rietveld's talk of aesthetic reactions: these are immediate and evaluative reactions of appraisal or disapproval, where the evaluative moment is not merely on a pleasure vs. disgust axis, but on the axis of aesthetic *value*.

> You design a door and look at it and say: "Higher, higher, higher... oh, all right." (Gesture) What is this? Is it an expression of content?
> Perhaps the most important thing in connection with aesthetics is what may be called aesthetic reactions, e.g. discontent, disgust, discomfort.... The expression of discontent says: 'Make it higher... too low!... do something to this.' (Wittgenstein 1966, 13; see also 3)

Aesthetic taste is inevitably culturally shaped, and yet it often finds its most *appropriate* form of expression not in a propositional judg-

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8 This aspect is perfectly in line with a 'bottom-up' enactivist account; see Moyal-Sharrock 2013.

ment – as one could think, given the alleged 'high level' cognition involved – but in *a normative gesture*. Sometimes in the domain of aesthetics we are really unable to explain in words what we can express in gestures, facial expressions, and fine shades of behaviour (Wittgenstein 1966, § 12).[9]

The understanding of works of art, for instance of a musical piece or a musical phrase, is also typically (though not exclusively) expressed in appropriate gestures and behaviour (Wittgenstein 1998, 79).[10] The reaction to a piece of music is immediate *and* it involves culture-specific competence. As Schulte (1993, 53) puts it, making the point more general:

> Even our so-called "spontaneous" forms of reactions – certain kinds of gestures or dance steps when listening to music, exclamations like "Ouch" or "Help!" or more complicated forms of behavior in the case of pain – will acquire sense only within a language game and hence through their connections with certain kinds of conduct and through being embedded in relevant practices. […] A new experience is not even an experience if the relevant concepts are lacking, that is, if one has not learnt to make a number of moves in the language game in question. And if we do not know the techniques to be used in the language, there will be no spontaneous reactions to our experiences.

Spontaneity is cultural, and this is what a truly enactivist account of normativity should be able to describe. Aesthetic gestures are an example of this spontaneous normativity: they are embodied, enactive, and they show that normativity is in everyday life (Frega 2015), rather than being a set of rules that somewhat stay above our heads and that we sometimes consult, pick up and apply.

5 Pragmatist Cultural Enactivism

The notion of enacted normativity that emerges in investigating gestures is especially interesting for pragmatist-inspired enactivism (Menary 2016; Madzia, Jung 2016; Gallagher 2017; Madzia, Santarelli

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[9] This is also related to Wittgenstein's notion of 'imponderable evidence' (Wittgenstein 2009, part II, §§ 358-60); cf. Boncompagni 2018b.

[10] For a comparison between language and music based on gesture see Oliva 2016. Wittgenstein also compares works of art themselves to gestures (on this see Milkov 2020): "Architecture is a gesture – he claims for instance –. Not every purposive movement of the human body is a gesture. Just as little as every functional building is architecture" (Wittgenstein 1998, 49): there is something in a gesture that exceeds purposive movement, it exceeds movement as a function of the organism.

2017; Weichold 2017). As Gallagher, referring to Robert Brandom, has suggested: gestures have "socially instituted significance and normative status" (2017, 172), in that they are part of how we grasp other people's intentionality (without the need of postulating internal states of mind) and of how we track other people's behaviour (without the need of explicit rules for that). Gestures indeed transcend their merely motor aspects and are both natural and conventional, precisely like language (Gallagher 2005, 122, 126).

Like Wittgenstein, the pragmatists point at the intertwinement of bodily/natural and sociocultural/normative aspects in the human form of life (but see Boncompagni forthcoming for differences). This is clear in the pragmatist notion of habit. From a pragmatist perspective, habit is essentially the result of 'paths' or 'channels' formed in the brain, but at the same time it is socially and culturally shaped, as the individual is a social and cultural being from the start. Gesture, in this sense, is revelatory of habits of acting and thinking.

Not coincidentally, one of the most relevant accounts of gestures in philosophy is due to the pragmatist thinker George Herbert Mead, who identified in gesture "the basic mechanism" of the social process:

> Within any given social act, an adjustment is effected, by means of gestures, of the actions of one organism involved to the actions of another; the gestures are movements of the first organism which act as specific stimuli calling for the (socially) appropriate responses of the second organism. […] The specialization of the human animal within this field of the gesture has been responsible, ultimately, for the origin and growth of present human society and knowledge, with all the control over nature and on the human environment which science makes possible. (Mead [1963] 2015, 13-14, fn. 9)

Against the idea of gesture as the expression of an already formed internal mental state, Mead claimed that consciousness itself emerges from the mechanism of gestures, once a participant hears his/her own vocal gesture in an interaction and learns to react to it. Therefore, the social act (the conversation of gestures) is a precondition of consciousness rather than the other way around (Mead [1963] 2015, 17-18). While this idea of the development of consciousness sounds in line with the participatory sense-making approach, in earlier writings Mead also highlighted bodily attitudes, facial expressions and the tone of voice as affectively felt in the social exchange (Mead 1895, [1895] 2001). By taking into account the human embeddedness in a sociocultural environment, it is possible to envision here a perspective in which linguistic and broadly cultural and normative practices

reshape bodily and emotional gestures themselves.[11] In other words, affective sensibility as a means of reciprocal regulation is reshaped by virtue of its belonging to a cultural and linguistic context from the start (Dreon 2019b).

This understanding of gestures and emotive responses as already normatively shaped is also coherent with Dewey's cultural naturalism. Of the many aspects of Dewey's approach, I would like to highlight here one that strikes me as a pragmatist equivalent of the Wittgensteinian reflection on aesthetic reactions and aesthetic gestures, namely, his remarks on linguistic ejaculations and interjections. In his article "Qualitative Thought", published in 1930, Dewey claimed that some expressions such as 'Alas', 'Yes', 'No', or 'Oh!' are not merely organic responses of the human being, but symbolize "an integrated attitude towards the quality of a situation as a whole" and "have an intellectual import" ([1930] 1984, 250). Moreover, he claimed, like Wittgenstein, that sometimes an aesthetic judgment concerning, for instance, the quality of a piece of acting on the stage, or a deed performed, or the "a picture with its wealth of content", finds a better expression in these symbols, or in an exclamation like "Good!" (something that Wittgenstein would say is just like a gesture), rather than "in a long-winded disquisition" ([1930] 1984, 250). These expressions, for Dewey, are examples of *qualitative thought*, a wording that already manifests the interlacing of immediacy and normativity.

> While they are primitive, it does not follow that [such ejaculatory judgments] are always superficial and immature. Sometimes, indeed, they express an infantile mode of intellectual response. But they may also sum up and integrate prolonged previous experience and training, and bring to a unified head the results of severe and consecutive reflection. ([1930] 1984, 250)

Attention to the qualitative is a constant element in Dewey's thought (see for instance Dewey 1925). The passages just quoted show that for Dewey, in the human context, immediacy is permeated and structured by evaluative and normative strands. In this sense, it is precisely the *richness* of human beings' interactions with their environment that Dewey invites us to look at, *contra* reductionist accounts. This also means acknowledging the impact of culture and language on alleged basic aspects of cognition such as perception, motor action, and affective sensibility, seeing the human ecological niche as highly social, culturally stratified, and linguistic. This suggests, again, that the separation between 'low' and 'high' cognition is itself problematic and misleading (Dreon 2019a).

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11 On the normativity of emotions see Hufendiek 2017.

6 Conclusion

The issue of normativity proves tricky for enactivist approaches. Accounting for it in a naturalistic framework and at the same time avoiding forms of reductionism is no easy task. Some versions of enactivism that project normativity upon a merely autopoietic and adaptive behaviour risk missing the point when they tend to misapply concepts that are appropriate to the human domain onto basic forms of life, and/or suggest that normativity can be explained by reference to these basic behaviours. Other enactivist approaches focused on the human sociocultural environment seem more promising. An enactivist account of normativity in the human context is indeed particularly apt to capture the embodied and spontaneous nature of normative constraints in everyday activities and interactions, unveiling how separating 'high' and 'low' or basic cognition is actually a misleading move. Aesthetic gestures show this very clearly. These natural, spontaneous and at the same time deeply cultural and evaluative reactions are examples of enacted normativity.[12] Aesthetic gestures were examined here in the framework of Wittgenstein's philosophy, but it was also argued that pragmatism developed a similar understanding, most notably with John Dewey's concept of 'qualitative thought'. To conclude: an enactivist inquiry into aesthetic gestures, supported by Wittgensteinian and pragmatist insights, could help characterize human cognition as intrinsically enactive *and* normative, exemplifying an authentically non-reductionist perspective.[13]

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12 Notice that they also respect the five features of normativity highlighted by Heras-Escribano (2019), within the ecological approach: correctness criteria, agency, intelligence, context-sentivity, and social constitution.

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