

Why Enactivists should care about Wittgenstein

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Abstract

There is now an established literature on the link between later Wittgenstein and enactivist approaches in cognitive science. However, is this link not just a matter for card carrying Wittgensteinians? Can enactivists not manage perfectly well without Wittgenstein? In this paper, I show why some enactivists should care about Wittgenstein. Focusing on the enactivist view, "Sensorimotor Identity", I argue that proponents of this view can use Wittgensteinian considerations to resolve an issue confronting their view and thereby shore up their proposed dissolution of the explanatory gap. Some enactivists thus have in fact much to gain by engaging with Wittgenstein.

Key words: Wittgenstein; enactivism; Sensorimotor Identity; phenomenal experience; explanatory gap;

1. Introduction

There is now a growing literature on the link between later Wittgenstein and so-called enactivist approaches in cognitive science (e.g. Boncompagni, 2013; Hutto, 2013; Hutto et al, 2014; Heras-Escribano et al, 2015; Loughlin, 2014, 2019; Moyal-Sharrock, 2013; Steiner, 2018).¹ Consider, for example, that if enactivists share a core idea², it is likely that mind and experience should be understood as embodied by agents as and when they interact with their environments. With appropriate caveats, Wittgenstein can be read as taking a similar view. For example, Wittgenstein (1993) wrote: “The essence of the language-game is a practical method (a way of acting, not speculation, not chatter)” (ibid p399; see also 1998, p36; 1983 p183-184).³

¹ Note that all subsequent references in this paper will be to the later Wittgenstein.

² There are significant differences among enactivists. For example, Mind/Life Enactivists (e.g. Thompson, 2007) emphasize the deep continuity between mind and life, insisting that even organisms like bacteria are agents capable of making sense of their environments. On the other hand, Sensorimotor Enactivists (e.g. O’Regan and Noë, 2001; Noë, 2004; O’Regan, 2009, 2011, 2014) claim that phenomenal experiences are best understood as involving, in some fashion, embodied know-how. Moreover, as this paper highlights, they also claim that this addresses, in various ways, “explanatory gap” issues. Finally, Radical Enactivists (e.g. Hutto and Myin, 2013, 2017) argue that contentful properties, like true, false, right or wrong, are not built-in features of human mentality but rather scaffolded by some of our social and linguistic practices. This paper focuses on Sensorimotor Enactivism. For a discussion of how Wittgenstein can impact on Radical Enactivism, see Loughlin 2014. For a discussion of how Wittgenstein can impact on Mind/Life Enactivism, see Heras-Escribano et al 2014.

³ I shall be using the following abbreviations to refer to works by Wittgenstein: 1993 = Philosophical Occasions; 1998 = Culture & Value; 1983 = Remarks on the Foundations of Mathematics; 2008 = The Blue and Brown Books. Details about these works can be found in the bibliography of this paper.

However, one may wonder about the import of this. Is this not just a matter for card carrying Wittgensteinians? Can enactivists not in fact manage perfectly well without Wittgenstein?

In this paper, I will argue that some enactivists should care about Wittgenstein. My focus here will be on an enactivist view "Sensorimotor Identity". According to proponents of this view, phenomenal experiences can be identified with actions. If action and experience can be so identified, then there is no so-called "explanatory gap" between action and experience. However, as I will show, if proponents are to successfully motivate this proposal, then they first need to explain where such identities come from.

I claim that proponents of Sensorimotor Identity can employ Wittgensteinian considerations to resolve this issue. For example, Wittgenstein's distinction between internal and external relations reveals that identities between action and experience come from our language-games. This is because within those games, statements can play grammatical roles. When statements play such roles, as they do when they are used to define phenomenal experiences, then there is no gap between action and experience. This then demonstrates why some enactivists should care about the link between Wittgenstein and enactivism. For by embracing this link, these enactivists can thereby resolve an issue confronting their view and so shore up their proposed dissolution of the explanatory gap.

The layout of this paper then is as follows. In 2, I outline Sensorimotor Enactivism, highlighting the issue that I claim Sensorimotor Identity faces. In 3, I summarise Wittgenstein's distinction between internal and external relations. In 4, I show how

proponents of Sensorimotor Identity can use this summary to resolve the aforementioned issue.

2. Sensorimotor Enactivism

Suppose you are holding a sponge in your hand.⁴ You squeeze the sponge tightly. While you squeeze it, you squish it between your fingers. In doing so you experience the sensation of softness.

It has now become a commonplace within discussions about phenomenal experience to think that there is a gap between action and experience. That is, there is a gap between, on the one hand, your physical action of pressing the sponge, and on the other, the particular sensation you have as and when you press the sponge. For why should *this* action (pressing the sponge) lead to *this* sensation (softness)? This has been termed the explanatory gap problem (e.g. Levine, 1983).

Proponents of Sensorimotor Enactivism have previously tackled this gap problem by dividing it into a series of further questions (Hurley and Noë, 2003). On the one hand, there are comparative gap questions. On the other hand, there is an absolute gap question.

Comparative gap questions are questions about the gaps within and between our various sensory modalities (smelling, tasting, hearing, touching, seeing). Think of squeezing the sponge. An example of a comparative gap question here would be: why should squeezing the sponge lead to the tactile sensation of softness and not another tactile sensation (hardness, say)?

⁴ I borrow this example from O'Regan (2011).

Most proponents now agree that invoking embodied know-how can help answer a comparative gap question like the one above. Consider that my interaction with the sponge has distinctive physical characteristics. I can change the shape of the sponge by applying pressure. When I cease to apply this pressure, the sponge returns to its original shape. Say these proponents, it is my implicit or practical know-how of these various physical changes or what are called “sensorimotor contingencies” that explains why my action is phenomenal. For a different set of sensorimotor contingencies and so different embodied know-how would result in a different phenomenal experience. Suppose that, unbeknownst to me, the sponge is in fact frozen solid. Then any attempts I make to squeeze the sponge and the embodied know-how I thereby acquire will lead me to experience the tactile sensation of hardness, not the tactile sensation of softness.

By such means, so claim these proponents, the comparative gap question can thus be answered. I feel softness and not hardness because of my embodied know-how of the sensorimotor contingencies invoked as and when I interact with the sponge. And what is true of touch is also true of the other sensory modalities, like smell (e.g. Cooke and Myin, 2011; Miller, 2020).

However, as is also recognized within the literature on Sensorimotor Enactivism, while the above may help answer comparative gap questions, it cannot help answer the absolute gap question. Consider that we can always posit some agent, such as a robot, that possesses embodied know-how of sensorimotor contingencies and yet has no phenomenal experience whatsoever (O’Regan and Noë, 2001, p980; see also Loughlin, 2018). And given that most within this literature take this possibility seriously, then it follows that the very fact of phenomenal experience – why we experience

anything at all - requires something much more than just embodied know-how.

Here is where proponents of Sensorimotor Enactivism part ways. For instance, O'Regan (2014) (see also e.g. Degenaar and O'Regan, 2015 & 2017) has argued that the extra ingredient needed for phenomenal experience comes from what he calls "cognitive access". Cognitive access is the idea that actions are phenomenal, not simply when agents have embodied know-how of sensorimotor contingencies, but rather when agents also cast their attention on and so access their know-how. O'Regan gives the example of two agents washing dishes with a sponge. Only one of those agents has a tactile experience of the softness of the sponge, says O'Regan, because only one of those agents casts their attention on and so accesses their embodied know-how. By contrast, the other agent has no such experience because this agent does not engage in any access. I shall call this the Cognitive Access view.

Others take a very different approach, however. Rather than try to identify some extra ingredient needed for phenomenal experience to occur, these proponents instead deny that there is any absolute gap question in need of answering (e.g. Loughlin, 2018, 2019; Myin and Loughlin, 2018; Myin and Zahnoun, 2018; Myin, 2016). This is because phenomenal experiences can be identified with actions. For example, to feel the softness of the sponge just is to interact with an object like a sponge. I shall call this view Sensorimotor Identity.

Note that this idea of identity is a recurring theme within Sensorimotor Enactivism. Even O'Regan (2009) talks of a "natural relation" between the qualities of our phenomenal experience and our embodied and embedded interactions with our environment. He writes: "to every aspect of phenomenology..there corresponds an

objective physical characteristic of the interaction” (ibid p588). Hence, the softness I feel as and when I squeeze the sponge, says O’Regan, is “a quality of the interaction [I] have with a soft object like a sponge” (O’Regan 2011 p108).

As with previous identity views, Sensorimotor Identity insists that identities, once in place, don’t require further explanation. That is, once actions are identified with phenomenal experiences, then it no longer makes sense to ask: if an action occurs, then why does a phenomenal experience occur? Under such circumstances, there is no gap between action and experience. Consequently, there is no absolute gap question in need of answering.

Now, my concern here is not to adjudicate between these competing views.⁵ Rather, I will adopt a diagnostic approach. That is, taking one of those two views under consideration, namely Sensorimotor Identity, I will diagnose, first, an issue I claim this view faces, and second, outline how this issue could be resolved using Wittgensteinian considerations. I begin with the aforementioned issue.

Proponents of Sensorimotor Identity, just like other enactivists, prioritize the role of action. Moreover, most proponents of Sensorimotor Enactivism, including those keen on Sensorimotor Identity, accept that not all actions are phenomenal. But if so, then it follows that there are actions that are not phenomenal, on the one hand, and identities between experience and action, that is, actions that are phenomenal, on the other. As previously discussed, once identities are in place, then there is no gap between action and experience and so no absolute gap question. Yet this still leaves

⁵ See Loughlin (2018) for such adjudication.

the following question, namely where do these proposed identities between action and experience come from? ⁶ Until this issue is resolved, it is unclear how persuasive Sensorimotor Identity's proposed dismissal of the absolute gap question can be.

In what follows, I will show that proponents of Sensorimotor Identity could potentially resolve this issue if they were to endorse Wittgensteinian considerations, in particular, Wittgenstein's distinction between internal and external relations.

3. Internal Relations

The distinction between internal and external relations is a recurring theme throughout Wittgenstein's work. ⁷ In this section, I will summarize some of the leading interpretations of such relations within the secondary literature on Wittgenstein. Before doing so, however, I will first offer some brief background remarks on Wittgenstein's approach to language.

Wittgenstein (2008) insisted that, "[t]he sign (the sentence) gets its significance from the system of signs, from the language to which it

⁶ Myin (2016) uses phenomenological considerations, such as Merleau-Ponty's distinction between the lived body and the objective body, to show that, once identities are in place, then there can be no absolute gap. However, Myin also notes, "the insight gained by pursuing the lived/objective difference does not offer first principles from which some form of identity between perceptual experience and physical happenings [can] be derived" (ibid pp5-6). That is, phenomenological considerations leave it open where such identities come from. Whether or not this is correct, it nonetheless suggests that the question I raise in my paper – where do identities between action and experience come from? – has so far not been answered within the literature on Sensorimotor Identity.

⁷ According to Macha (2015), the distinction between internal and external relations was not peculiar to Wittgenstein. For example, it can also be found in the work of Moore, Russell and Bradley (ibid p18). Moreover, as Macha points out, while the distinction recurs throughout Wittgenstein's work, it is not always referred to as such: "Instead of 'internal relation' Wittgenstein [in his later work] now uses 'grammatical relation' and instead of 'external relation' he uses 'factual relation' (ibid p12). For ease of exposition however, I refer to internal and external relations throughout my paper.

belongs" (ibid p5) and that it is only "[a]s a part of the system of language, one may say, the sentence has life" (ibid). That is, while it is correct to appeal to the uses we make of words and statements in order to understand how they have meaning, we need to see those uses, not as further objects that accompany those words and statements, but rather as the roles they play within our language-games. Braver (2012) summarizes this point as follows: "We must look at *words at work* because this is when their holistic integration into language-games circulates meaning through them" (ibid p104 italics added). That is, words and statements have the meaning they do because of the work they do within our language-games.

I now turn to Wittgenstein's distinction between internal and external relations.

A comprehensive account of such relations comes from Macha (2015). Macha lists five characteristics of such relations as they feature within Wittgenstein's later work.⁸ He writes:

1. Internal relations hold only between concepts while external relations hold between objects and concepts.
2. Internal relations can be exhibited in grammatical propositions, which express either rules of a language-game or general facts of our human form of life.
3. Propositions that express internal relations are timeless, whereas propositions that express external relations are temporal.

⁸ Note that the primary focus within the literature on Wittgenstein and enactivism has so far been on Wittgenstein's later work, in particular, his work including the *Philosophical Investigations* and beyond (sometimes referred to as the "Third Wittgenstein"). Given that the object of this paper is show why enactivists should care about Wittgenstein, then I have focused on how the distinction between internal and external relations plays out in Wittgenstein's later work.

4. internal relations relate their terms only in virtue of these very terms, not in virtue of other things or rules.
5. Internal relations allow no exceptions" (ibid p101).

In what follows, I will expand on each of these five characteristics, focusing in particular on internal relations. I begin with the first characteristic.

For Macha, internal relations hold between concepts. Macha elsewhere says that, "internal relations hold between complexes. They cannot be described, but only shown in descriptions of these complexes. These complex relata do not need to be restricted to facts; they can also be complex acts, practices, or types of behaviour" (ibid p83).

The idea here then is that when complexes are internally related, then this relation is shown or displayed via the complexes themselves. Monk (1991) illustrates this using the following example:

"the relation between a musical score and a performance cannot be grasped causally...nor can the rules that connect the two be exhaustively described – for, given a certain interpretation, *any* playing can be made to accord with the score. Eventually, we just have to 'see the rule in the relations between the playing and score.' If we cannot see it, no amount of explanation is going to make it comprehensible" (ibid p301-302 italics in original).

Krebs (2010) makes a similar point. He writes: "seeing internal relations is not only conceptual but also sensible and mimetic – or perhaps better said: that the conceptual is at the same time, and

sometimes primarily, sensible and mimetic" (ibid). Crucially, as Monk points out, if someone can't or won't see the internal relations on display, then no further explanations can help them. Here is where our explanations come to an end and our spade is turned.

The second characteristic of internal relations, insists Macha, is that such relations are "exhibited in grammatical propositions". Macha also says: "internal relations are relations that hold in virtue of grammar. Grammatical propositions are either explicit statements of the grammar of a language-game or also – in Wittgenstein's final texts – implicit descriptions of our human form of life" (ibid p83). Glock (1996) makes a similar point when he describes internal relations as "structural" (ibid 190). Moreover, given that internal relations are shown or displayed in grammatical propositions, then, as Glock puts it, there can be "no such thing as justifying or doubting an internal relation" (ibid p191). Monk (1991) agrees: "The 'internal relations', which are established by grammar, cannot be further examined or justified" (ibid p301-302). As before, one simply has to see the internal relations on display.

The third characteristic of such relations, according to Macha, is that, "[p]ropositions that express internal relations are timeless". Macha (2015) refers to this as the "criterion of temporality" (ibid p95). He writes: "This criterion gives us a tool or method for determining whether a given sentence expresses an internal or external relation in a given language-game" (ibid p96).

Think back to Monk's example of the relation between a musical score and a performance of that score. This example fulfills Macha's criterion of temporality. For relation between the score and the performance is internal to the performance. In this sense, the relation is not dependent upon facts such as who is performing the

music or where and when the music is being performed. For any performance of this piece of music, regardless of who performs it or where and when it is performed, will be internally related to the musical score. In this sense, the relation on display is timeless or non-temporal.

The fourth characteristic of internal relations is that such relations "relate their terms only in virtue of these very terms, not in virtue of other things or rules" (Macha 2015 p101). Macha also states: "the terms of an internal relation are related directly, without any mediation, to each other" (ibid p96). Both Glock and Ter Hark make similar points. Glock (1996) states: "[internal relations] cannot be underpinned or explained by postulating mediating links between the relata...Since the relation is (partly) constitutive of the relata, one cannot coherently deny that it obtains without ceasing to talk of those relata" (ibid pp190-191). Ter Hark (1990) states: "A characteristic of internal relations is that the two members cannot be identified independently of each other" (ibid p182-183).

The idea here, I take it, is that if there is an internal relation between two complexes, then this means that there can be no third item that links these complexes. Continuing with Monk's example, there thus can be no third item (say, in the minds of the musicians performing the piece of music or in the mind of the composer as the piece of music is performed) that links the score for the music to the performance of that piece of music. Instead, the performance is internally related to the musical score, which is to say that there is direct or non-mediative relation between the two. Contrast this, say, with an external relation between a concept and object where there can be some third item that mediates between the concept and the object.

The fifth and final characteristic of internal relations is that they allow no exceptions (Macha 2015 p101). This ties together with the third characteristic of such relations. For if internal relations are timeless or non-temporal, then this entails that there can be no circumstances under which an internal relation would not hold, since if there were such circumstances, then the relation involved would not be internal but rather external. In Monk's example, a performance of the music that was not internally related to the score for that music would make no sense, since, by definition, it would be a different piece of music.

Thus, to summarise, internal relations, in contrast to external relations, relate concepts, that is, complexes, which can be facts, actions, practices or types of behaviour. Such relations are displayed in grammatical propositions. One simply has to see these relations at work. Moreover, it is in the nature of such relations that they are timeless, direct or non-mediative and admit of no exceptions.

In what follows, I will return to Sensorimotor Identity and show how proponents of this view can use the sort of summary given above to resolve the issue detailed in section 2.

4. Wittgenstein and Sensorimotor Identity

Recall that, for proponents of Sensorimotor Identity, to feel the softness of the sponge just is to interact with an object like a sponge. However, when stated in this fashion, it may appear that the identity between the action (squeezing the sponge) and the experience (the feeling of softness) is just some contingent fact about what happens, say, whenever you or I squeeze a sponge, that is, it just notes that whenever you or I squeeze a sponge, we

happen to feel softness. But why then should squeezing a sponge lead to any experience? For if action and experience are just linked in this contingent fashion, then we could always posit an agent squeezing a sponge but not feeling anything at all. In which case, the absolute gap question is back in play.

Thus, if proponents of Sensorimotor Identity are to identify action with experience in a way that can successfully dismiss the absolute gap question, then the identity in question must be necessary. That is, when it comes to squeezing the sponge, the experience (the feeling of softness) must occur whenever the action (squeezing the sponge) occurs. This, so I claim, is where Wittgenstein's distinction between internal and external relations can help. Consider the following.

Suppose I were to say, "This sponge is soft" while simultaneously squeezing a sponge. Here my statement is just a description of what I am feeling as and when I squeeze the sponge. Understood in this way, my statement is contingent. That is, when I say, "This sponge is soft", my statement is contingent upon the fact that I am indeed experiencing the feeling of softness. As we saw in section 2, I could have picked up the sponge thinking it would feel soft but instead found, perhaps to my surprise, that it felt hard (maybe because it was frozen solid). This is one version of the sponge example.

However, suppose I am instead asked what softness feels like. By way of reply, I get the questioner to squeeze a sponge while I say, "That is what softness feels like". Under these circumstances, my statement is not contingent. Using Wittgenstein's terminology, my statement is instead grammatical. One reason to regard it as such comes from Glock (1996), who points out that, according to

Wittgenstein, "a grammatical proposition expressing a linguistic rule need not be a meta-statement about the employment of words, or contain expressions of generality. Rather, [grammatical statements] depend on whether an expression has a normative function on a given occasion" (ibid p324). In the circumstances laid out above, my statement does have a normative function, since my statement defines what softness feels like. If so, then it is grammatical. This is a second version of the sponge example.

Now think back to Wittgenstein's distinction between internal and external relations. Using this distinction, we can say the following. In the first version of the sponge example, there is an external relation. External relations, as described in section 3, are relations between concepts and objects. The concept here is my experience of softness. The object is my action of squeezing the sponge. Moreover, as this is an external relation, then this relation could have been otherwise (the sponge could have felt hard and not soft). By contrast, in the second version of the sponge example, my statement is grammatical. As Macha notes, statements that play grammatical roles, according to Wittgenstein, can show or display internal relations. Internal relations, as described in section 3, are relations between concepts, that is, relations between complexes. What are the complexes involved here? One is the statement, "That is what softness feels like". The other is the action of squeezing the sponge. These complexes are internally related in the sense that the relation between the two is necessary, that is, it could not be otherwise. Consider if we were to try to separate the action from the statement, then the statement would cease to be definitional. Given then that proponents of Sensorimotor Identity need to link action and experience in a necessary fashion, then it follows that such proponents need to focus on internal and not external

relations, that is, they need to focus on the second version of the sponge example.

Return then to the second version. Following Wittgenstein's distinction, we can see that this example has a number of further characteristics. First, the questioner simply has to see the internal relation on display. If they were insist that they still didn't know what softness felt like despite our definition, then no further demonstrations by me or anyone else could help them. Here is where our explanations come to an end and our spade is turned. Second, the internal relation is timeless or non-temporal. That is, there can be no exceptions to this relation. It would make no sense, for example, for me to say, "That is what softness feels like now". Third, my statement "That is what softness feels like" is related directly to the action (performed by the questioner) of squeezing the sponge. There can be no third item (either inside my head, inside the head of the questioner or spread out in the environment) that mediates between my statement and the questioner's action.

If so, then the second version of the sponge example arguably meets the requirements for an identity relation, since, on this version, the internal relation between the statement and the action is necessary.

A concern here however might be the following. Surely, you might think, we can and do distinguish my statement "That is what softness feels like" from the action (performed by the questioner) of squeezing the sponge. After all, one is a statement I make, the other is an action performed by the questioner. But then the statement and the action are distinct. How then can there be an identity between the two?

According to Macha (2015), "An internal relation is not one of pure identity. The terms of an internal relation are in a certain sense the same (qua internal) and in another sense they are different (qua relation)...Any identity, if it should be informative, is only a partial identity (i.e., identity in certain respects and non-identity in certain other respects)" (ibid p209-210). Apply this to our sponge example. We can distinguish between the statement and the action and when we do make this distinction, then there is no identity between two. Nonetheless, whenever my statement defines what softness feels like, as it does in the second version of the sponge example, then there is an identity between the statement and the action. For under these circumstances, the relation involved here is necessary, that is, it could not have been otherwise, since if we were to separate the statement from the action, then the statement would cease to be definitional. In which case, there is an identity in the sponge example. But this identity is only partial. However, this is true of internal relations. As Macha points out, internal relations are not relations of pure identity.

However, another concern might be that if the identity in question is only partial, then does this not re-introduce the absolute gap? Yet once it is understood what it means to identify action and experience using internal relations, then, so I claim, this concern can be addressed. For it does not mean identifying some thing called "experience" with bodily action. Nor does it mean reducing experience to bodily action. It instead means focusing on our language-games, in particular, on the grammatical roles that statements can play within those games. For when statements play such roles, as they do when we use them to define phenomenal experiences, then, due to the internal relations involved, there can be no gap between action and experience. Think of the second version of our sponge example. If my statement "That is what

softness feels like” is related directly or non-mediatively to the action (performed by the questioner) of squeezing the sponge, then this ensures that the tactile of experience of softness is defined by the action of squeezing a sponge. That is, language, action and experience are here logically intertwined. If so, then there is no gap.⁹

As further support for this proposal, consider the following three examples.

1. I am asked what redness looks like. I point to a red apple and say, “That is what redness looks like”. Under these circumstances, my statement is grammatical. For I am using it as a definition of what redness looks like. If so, then under these circumstances, my statement shows or displays an internal relation two complexes, namely my statement, “That is what redness looks like” and my action of pointing at a red apple. This relation is necessary, that is, it could not have been otherwise. If we tried to separate the statement from the action, then my statement would cease to be definitional.

2. I am asked what an orange tastes like. I answer by getting the questioner to bite into a slice of orange while I say, “An orange tastes like that”. Here my statement is grammatical, since it defines what an orange tastes like. As such, it shows or displays an internal relation between two complexes, namely my statement “An orange

⁹ Macha (2015) also states: “Expressing an internal relation can function as a reminder to someone who is not aware of the logic of our language or it can function as a stimulus to improve our logic or grammar” (ibid p201). This is true of the sponge example. The logic of our language-game, as revealed by the internal relations involved, is such that the tactile feeling of softness is defined by the action of the squeezing the sponge. And what is true of this example is also true of the other examples I give (the visual experience of redness, the taste experience of orange, the smell of onion). In all these examples, language, action and experience are logically intertwined.

tastes like that” and the action (performed by the questioner) of biting into a slice of orange. This relation is necessary, that is, it could not have been otherwise. If we tried to separate the statement from the action, then my statement would cease to be definitional.

3. I am asked what an onion smells like. I reply by saying, “An onion smells like that” while getting the questioner to smell an onion. As with the previous examples, my statement is grammatical, since it defines what onion smells like. If so, then it shows or displays an internal relation between two complexes, namely my statement “An onion smells like that” and the action (performed by the questioner) of smelling the onion. This relation is necessary, that is, it could not have been otherwise. If we tried to separate the statement from the action, then my statement would cease to be definitional.

I claim that all three examples share the characteristics that applied to the second version of the sponge example.

First, the questioner simply has to see the internal relations on display. If they can’t or won’t see these relations, then no further explanations by me or anyone else can help. Second, these relations are timeless or non-temporal. That is, there can be no exceptions. It would make no sense for me to say, “That is what redness looks like now” or “An orange tastes like that now” or “An onion smells like that now”. Third, there can be no third item that links these complexes. When I say, “That is what redness looks like”, my statement is directly related to the action of pointing at a red apple. There can be no third item (either in my head or in the environment) that mediates between my statement and my action. When I say, “An orange tastes like that”, my statement is directly

related to the action (performed by the questioner) of biting into a slice of orange. There can be no third item (either in my head, in the head of the questioner or spread out in the environment) that mediates between my statement and the questioner's action. When I say, "An onion smells like that", my statement is directly related to the action (performed by the questioner) of smelling an onion. There can be no third item (either in my head, in the head of the questioner or spread out in the environment) that mediates between my statement and the questioner's action.

In which case, these three examples, just like our previous sponge example, meet the requirements for an identity relation between action and experience, since in all three examples the relations involved here are necessary. Moreover, when statements are used in the sort of grammatical way described in these examples, then there can be no gap between action and experience. That is, the direct or non-mediative relations between these statements and actions mean that just as the tactile experience of softness was defined by the action of squeezing a sponge, then so too the visual experience of redness is defined by the action of pointing to a red apple, the taste experience of an orange is defined by the action of biting into a slice of orange, the smell experience of an onion is defined by the action of smelling an onion. As with the sponge example, language, action and experience are here logically intertwined, hence why there is no gap.

Recall then the question raised in section 2. For proponents of Sensorimotor Identity, actions can be identified with experiences. Yet where do these identities between action and experience come from? If such proponents were to endorse Wittgenstein's distinction between internal and external relations, and so adopt the sort of proposal sketched above, then they could now answer this question.

Such identities come from our language-games. For when statements play grammatical roles, then there is no gap between action and experience.^{10 11}

5. Conclusion

Discussion of the link between later Wittgenstein and enactivist approaches is an ongoing development within the literature. Yet one could be forgiven for wondering about the merit of this. Is this not just a matter for card carrying Wittgensteinians? Can enactivists not manage perfectly well without Wittgenstein?

In this paper, I have shown why some enactivists should care about Wittgenstein. Focusing on the enactivist view "Sensorimotor Identity", I have shown how Wittgenstein can help proponents of this view resolve an issue confronting their view. For where do the supposed identities between action and experience come from? The

¹⁰ Note that if proponents of Sensorimotor Identity were to accept these Wittgensteinian considerations, then comparative gap questions, just like the absolute gap question, require dissolution and not solution. This is because the differences within and between sensory modalities will come via our language-games, that is, via statements that are grammatical, such as statements that act as definitions of phenomenal experiences.

¹¹ Some proponents of Sensorimotor Enactivism may take issue with this answer. For example, O'Regan (2011) has insisted that phenomenal experiences are ineffable. The idea here seems to be that we often cannot put into words what an experience is like. Instead we have to demonstrate or act out that experience. O'Regan gives the following example: "[y]ou can describe the taste of caviar to someone as much as you like, but only when you actually taste caviar will you be able to say, "Oh, that's what caviar tastes like" (ibid p105). If so, then O'Regan would likely take issue with my claim that our language-games play a defining role in phenomenal experience. In response, I would deny that experiences are ineffable. Think of the second version of the sponge example cited in my paper. The internal relations involved here mean that the tactile experience of softness is defined by the action of the squeezing of the sponge. The experience is thus demonstrated or acted out. All of this is made possible by our language-game. In which case, while O'Regan is correct to insist that phenomenal experiences are demonstrated or acted out, he is incorrect to also claim such experiences are ineffable.

answer, I have suggested, is that they come from our language-games. In which case, proponents can use Wittgenstein to resolve an issue confronting their view and thereby shore up their proposed dissolution of the explanatory gap.

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