BELIEF WITHOUT REPRESENTATION

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ABSTRACT

In this article, I set off to explore the question "What is belief?" from a first-person perspective. Finding the explanations in analytical philosophy insufficient, I delve into the phenomenological tradition – starting with Edmund Husserl's concept of the horizon. In doing so, I find that the phenomenological tradition seems to contradict the presupposition of beliefs as representations. Directing my attention to finding an alternative explanation, I present Hubert Dreyfus' explanation of learning without representations, but show that (by Dreyfus' own admission) he does not truly take a decisive step away from representationalism. I present the idea of enaction as a proper alternative to representations. Within this new framework, I present the idea of sense-making as a potential direction towards an answer to the question at hand.

KEY WORDS

belief, representation, phenomenology, enaction

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INTRODUCTION

We tend to judge ourselves by our intent, we tend to judge others by their behavior.

Stephen M.R. Covey

Contemporary analytic philosophy understands belief as a propositional attitude – a mental state of having a certain attitude towards a proposition or the state of affairs described by the proposition, specifically, the attitude of regarding the proposition (or state of affairs) to be true. Beliefs are assumed to play a causal role in the production of behaviour. Indeed, many branches of analytic philosophy of belief deal primarily with behaviour (such as dispositionalism, interpretationalism and functionalism) and the criteria required in order to attribute belief to a behaving being [1] (most notable example of this being [2]).

The stance of analytic philosophy on belief (before behaviour) is varied, but what is commonly accepted is the representationalist assumption that in a believing being's head or mind there are representations with the same (propositional) content as the belief.

Accounts quickly diverge regarding what these representations look like. Beliefs (and their representations) are sometimes regarded as occurring in the form of sentences in an internal language of thought [2], but this proves problematic when considering the sheer number of beliefs (i.e. sentences) that would need to be stored within the mind [1]. To borrow Eric Schwitzgebel's [1] example: if I believe that our solar system has 8 planets, then I should also believe that it has less than 9 planets, and less than 10 planets and so on ad infinitum. This (easily generalizable) example alone would amount to an infinite number of sentences taking up an infinite amount of space in the believing mind. This problem is solved by introducing the term implicit belief, that is, a belief that is not explicitly represented in the mind, but can be swiftly derived from other beliefs [1]. It is sometimes suggested that beliefs are not linguistic at all, but instead take on a map-like structure [1]. This way, if I had simply a "map" of the solar system in mind, I need only look at that to determine there are 8 planets, and that there are less than 9, and less than 10, etc.

But is this map now a representation of a belief, or is it something else from which beliefs are formed? Is it fair to say that I've always had the belief that our solar system has less than 329 planets, despite this being the first time I have thought about this particular number? Is this belief represented somewhere in my mind or does it form only when I take this particular proposition into consideration? Seeing how these questions pertain to belief prior to any behaviour it (supposedly) spurs, it seems sensible to look within a working mind – not by analysing the behaviour of somebody else's but the intentions of our own. In order to try and find an answer, I turn towards the first-person perspective on belief, towards the phenomenological tradition.

In this article I very roughly sketch out some ideas from the field of phenomenology that might provide an account of, or at least some clues towards, what it is like to have beliefs. In order to home in towards an answer, this investigation touches upon many phenomena related to beliefs, such as knowledge, expectation, meaning, learning and others. However, quite early in this examination of a phenomenology of belief a problem with our presuppositions arises. Phenomenological accounts (most notably that of Edmund Husserl, on whose work almost all of phenomenology stands) presented in this article seem to suggest that the idea of perceiving belief as represented (or itself a representation) is incompatible with the first-person perspective. What is perhaps needed, then, before delving more seriously into the phenomenology of belief, is a different way of thinking about beliefs. As it happens, one such way arises from phenomenology itself.

HORIZON OF IMPLICIT BELIEFS

To begin with, let us look at an example of a phenomenological explanation of belief and its related phenomena. For this purpose, I present Husserl's concept of the horizon – a very broad concept that could not possibly be exhaustively explained in such a short article. I will therefore only attempt to provide a rough sketch that should communicate the gist of Husserl's idea.

Husserl usually describes the horizon in the context of experiencing a certain object. This experience of the object is "partly surrounded by a dimly conscious horizon of undetermined reality" [3; p.49]. The horizon, in this sense, is what we are co-conscious[1] of besides our experience of an object. As I[2] am writing this, my attention is on the screen and the letters appearing there as I type, but somewhere on the periphery of my attention (the horizon) is an awareness of my body, an awareness of the table and wall behind the screen, an awareness of the room behind me, etc.

In a somewhat similar sense, the horizon appears in Husserl's analysis of time consciousness. Gallagher and Zahavi [3] summarise Husserl's argumentation that experiencing is not made up of a series of consecutive discrete experiences. In order to experience temporal continuity, we need to in every moment be aware of moment before (what Husserl calls retention), as well as have some sort of anticipation of what might occur next (protention). This co-awareness cannot be, as Gallagher and Zahavi [3] stress, simply remembering what was or imagining what will be. Remembering and imagining are activities unto themselves and we do not perform them every waking moment. Gallagher and Zahavi [3] provide the example of hearing a melody. It does not occur so that I hear a note, that note completely vanishes from my conscious experience and then the experience of a new note appears. "Rather, consciousness retains the sense of the first note as I hear the second note, a hearing that is also enriched by an anticipation of the next note" [3; p.84]. My experience of the note E flat by itself is very different than when it is preceded by the note G three times (as they together make for the distinctive four-note motif of Beethoven's 5th Symphony). Upon hearing the E flat, I do not remember what it was like to hear the three Gs, rather, their experience still lingers as E flat rings. This co-experiencing of the passing shadow of the just past and an inkling of what is coming is what could also be understood as the horizon.

Furthermore, the importance of expectations in the horizon surpasses the scope of time consciousness. When experiencing an object, we have tacit expectations regarding further possible experiences connected with that object. For example, as I move to pick up a rock, I expect the rock to feel cold, to have a certain weight, a certain texture, etc. "When things go as expected, our current experiences 'fulfill' (erfüllen) our previous expectations … . When things do not go as expected, our experiences 'frustrate' (enttäuschen) our previous 'expectations' (Erwartungen)" [5; p.124]. If, when we do eventually pick up the rock, it turns out to be hot, or to be very light, or to be sticky, our expectations are frustrated – we feel surprise.

Our expectations of an object are tied to our knowledge – or "preknowledge" as Jeffrey Yoshimi [5] translates the German "Vorwissen" – of that object. Horizon expectations are thus based on type information [5]. What we expect of an object depends on our preknowledge of the type this objects belongs to. Oft quoted is Husserl's example of encountering a dog:

"When we see a dog, we immediately anticipate its additional modes of behavior: its typical way of eating, playing, running, jumping, and so on. We do not actually see its teeth; but we know in advance how its teeth will look – not in their individual determination but according to type, inasmuch as we have already had previous and frequent experience of 'similar' animals, of 'dogs,' that they have such things as 'teeth' and of this typical kind" [6; p.288].

Of course, type knowledge does not provide us with specific, discrete expectations about an object [5]. Picking up a rock, I do not expect it to weigh exactly 0,963 kilograms and have a surface temperature of 14,1 °C, rather my horizon expectations correspond to a range of possibilities. "Metaphorically, our tacit understandings are structured into what Husserl calls 'leeways' or 'latitudes' (Spielräume) of possibilities, which we can think of as ranges of possible further experience" [5; p.125]. My expectations are then that this particular rock will be about as heavy as rocks that size usually get and coldish to the touch. Only when our actual experience falls outside the range of expectations do we feel surprise – e.g. when the rock turns out to be feather-light or warm to the touch.

However, these ranges of horizon expectations are not set in stone. They change and adjust through the flow of new experiences – "the horizon is dynamic" [5; p.125]. If the rock does turn out to be lighter than expected, rougher than expected, warmer than expected, I adjust my perception of it (rather than staying paralyzed in continuous awe). It might turn out to be a piece of withered wood, so my horizon expectations adjust accordingly.

When my expectations are "frustrated" and I feel surprise, I usually consciously attend to whatever surprised me. This conscious turning towards has then consequences in the form of a horizon change. To quote Yoshimi [5]: "… this changes the way the object is for us. Our attentive activity leaves a 'precipitate' or 'sediment' (both are translations of Niederschlag) that changes the way we experience the object in the future" [5; p.127]. This description is reminiscent of learning in the sense of adjusting existing beliefs or acquiring new ones.

Related to the dynamic nature of the horizon is its dependence on the body – on my own bodily movements [5]. Backing up on my example with the rock a little, when I observe it from afar, I perceive it in a certain way. When I move my body to the left, my perception of the stone changes in a specific way; when I move to the right, it changes in another specific way. Husserl uses more mathematical language to describe this, describing the appearance of the object as a dependent variable relative to the independent variable that is bodily movement [5].

This, hopefully, captures the gist of Husserl's concept of the horizon – a dynamic range of preknowledge and expectations that tacitly reside on the edge of our awareness. The tacit nature of the horizon is often stressed: "horizon expectations or intentions are not explicit: they do not involve actively thinking 'here is what I expect'" [5; p.124]. As such, it might be arguable that the horizon could be comparable (though certainly not equatable) to the idea of implicit belief – an unarticulated presupposition of how the world is and behaves.

Does Husserl, then, also provide an account of what might be, on the surface, juxtaposed with explicit belief? While there is talk of explication, and it is, in a way, contrasted with the horizon, a correlation with explicit beliefs seems rather daring. According to Yoshimi [5], Husserl used the word "explication" (Explikation), when something "becomes my object of thought" [5; p.127] – though it should be noted that this does not necessarily involve exhibiting behaviour that might be observable from the third person, such as articulating a proposition, or even forming a proposition in a language of thought, just becoming aware of that something[3].

However, this explication does not mean that a pre-existing implicit belief (or horizon expectation) is brought to the forefront. The horizon is not a shadowy realm of properly formed beliefs and directing our attention there does not illuminate these beliefs for what they were from the beginning. Rather, explicating means "we marshal together constituents of the embodied horizon structure to construct new forms of experiential object" [5; p.127]. Yoshimi [5] elucidates this with an example of approaching a door and having a sense of its width: "There was no dim version of the explicit thought 'it is less than 5 feet wide' before

we had that thought, though we would have previously been surprised were a 6 foot wide object to have been pushed through it" [5; p.127].

The notion that explicating something does not mean illuminating something that was there before, but creating something new from what was there, warps the idea of representationalism, which perceives beliefs to be, roughly, propositions stored somewhere in the mind. Delving deeper into what that might look like from a first-person perspective, phenomenologists seem to propose that what is stored are not ready-made propositions, but gists, notions, and feelings from which propositions are formed ad hoc, if at all. Perhaps the idea of ready-made representations stored within the mind ought to be relinquished, as Gallagher and Zahavi remark [4; p.17]:

> "if a subject is asked 'Do you believe that p?', the subject does not start searching in her mind for the belief that p. Rather, she straightforwardly considers whether p is or is not the case about the world. So too, in regard to perceiving the world, the perceiver does not have to introspect for perceptual representations in her mind; she can say what she perceives simply by consciously perceiving the world. If you were asked whether it is raining outside, you would look out the window rather than inside your mind".

COPING WITHOUT REPRESENTATIONS

A move away from representations is also proposed by Hubert Dreyfus [7] in his explanation of skill acquisition, which he illustrates with examples of two hypothetical adults acquiring a skill through instructions, one learning to drive a car (a motor skill), the other learning to play chess (an intellectual skill). He divides the learning process into five stages, with the first stage (novice) still relying on representations such as the verbalized instruction "shift to second gear when the speedometer needle points to ten miles an hour" [7; p.368]. Novice drivers (and beginner chess players) are notoriously slow, as they have to constantly remember (recall the representations of) memorized rules for how to perform the corresponding tasks. In the descriptions of the following stages, Dreyfus [7] presents a slow departure from the dependence on propositional representations. He presents an example of an advanced beginner, in addition to looking at the speedometer, uses engine sounds (that cannot be simply articulated) to determine when to shift. At the third stage, there are simply too many rules for too many possible situations for the learner to remember. Thus, detached rule-following gives way to emotional involvement: a skilful response feels good, an unskilful one feels bad, so the learner tries to act in ways that feel good. At the fourth stage, intuitive behaviour starts to completely replace consciously and detachedly premeditated responses – "the learner simply sees what needs to be achieved" [7; p.371]. This is completely internalised at the fifth stage, when the expert acts completely intuitively and without prior reflection. When I, as a skilled driver, need to take a right turn, there is no conscious recollection and following of instructions to activate the turn signal, release the gas pedal, shift to a lower gear, and turn the steering wheel clockwise; I just go right. As Dreyfus himself succinctly puts it: "What must be done, simply is done" [7; p.372].

Dreyfus [7] leans heavily on Maurice Merleau-Ponty's concept of the intentional arc: "… which projects round about us our past, our future, our human setting, our physical, ideological and moral situation, or rather which results in our being situated in all these respects" [8; p.157]. This idea is congruent with Husserl's concept of the horizon – where our preknowledge, our inklings of our situation and setting, our immediate and long-term past and future are co-present. Dreyfus [7] perceives the intentional arc as "the tight connection between the agent and the world, viz. that, as the agent acquires skills, those skills are 'stored', not as representations in the mind, but as dispositions to respond to the solicitations

of situations in the world" [7; p.367]. To reiterate this in the context of the horizon: as we gain skills, those leave a 'precipitate' or 'sediment' on our horizon, which changes to accommodate new possibilities and expectations. In Dreyfus' own words: "What one has learned appears in the way the world shows up; it is not represented in the mind and added on to the present experience … but is presented to the learner as a more and more finely discriminated situation, which then solicits a more and more refined response" [7; p.373].

Dreyfus takes a very cautious and conservative step away from representationalism, which is further cemented in his reply to comments [9]. In his model, at the start of the process of skill acquisition, beliefs are still represented in the mind, while the intentional arc only becomes relevant in the later stages. But this raises the question: am I not, since the very beginning of my learning process, entangled in the intentional arc, which shapes how I perceive and approach the world? Are the first elements of learning (the instructions) different from other experience in that they are represented as explicit propositional beliefs? For the proposition "shift to second gear when the speedometer needle points to ten miles an hour" to have meaning for me, I need to have a lot of implicit beliefs about, for example, what a gear is and how to shift, what a speedometer is and how to read it, and so on. Where is the line between the represented and the not represented?

Dreyfus seems to stand above a chasm. On the one side he clings to the idea that the mind forms representations of an outer world. Exploring the possibility of learning without representations, he swings to the other side, where the world is only a projection (representation) of the structure of the mind. Despite denying that he has again succumbed to representations, he concludes his denial with: "All past experience is projected back into the world. The best representation of the world is thus the world itself" [7; p.373].

ENACTIVISM

A more consequent distancing from representations and a daring plunge into the chasm is done by Francisco Varela, Evan Thompson and Eleanor Rosch [10]. They present the two sides as objectivism – the world having pre-given properties that are discovered by the mind and represented within – and idealism – the world as a projection (or representation) of the structure of the mind. The middle path between these two positions is perceiving cognition as embodied action or enaction [10].

With the term embodied Varela, Thompson and Rosch emphasise that our perception of the world is shaped by "a body with various sensorimotor capacities, and … these individual sensorimotor capacities are themselves embedded in a more encompassing biological, psychological, and cultural context" [10; p.173] (cf. Merleau-Ponty's intentional arc). With the term action they emphasise the inseparability of sensory and motor processes. From recurring sensory-motor patterns emerge cognitive structures that in turn enable sensory-motor processes [10]. How I perceive the world to be is thus neither a representation of how the world actually is, nor a representation of the structure of my mind, but rather a product of perceptually guided action [10].

An emphasis on the body and its actions (or possibilities for action), was already mentioned by Husserl [3, 6] and greatly expanded on by Merleau-Ponty [8], on whose work a lot of the ideas of enactivism are based. One such idea is the idea of sense-making (what Merleau-Ponty refers to as Sinngebung), elaborated upon by Di Paolo, Rohde and De Jaegher [11]. The authors start from the argument that the interaction between an organism and its environment hold importance for the organism (with self-preservation as its goal). This creates a normative perspective on the world where some interactions or possibilities are more important than others [11]. Thus, organisms (or their cognitive systems) "cast a web of

significance on their world … and this is the definitional property of a cognitive system: the creation and appreciation of meaning or sense-making, in short" [11; p.39] (see also [12, 13]).

Di Paolo, Rohde and De Jaegher [11] emphasise that the organism is not just a passive recipient of information from the environment, which is then translated into internal representations and evaluated: "cognitive systems are simply not in the business of accessing their world in order to build accurate pictures of it" [11: 39]. Meaning is not an attribute of the environment that is discovered or attained by the organism, and neither is it something from within the organism that is reflected onto the world. It is the result of an on-going dialogue between the environment and the organism's embodied action (cf. [10]). The difference is highlighted by this quote from Heinz von Foerster [14; p.214]:

> " 'out there' there is no light and no color, there are only electro-magnetic waves; 'out there' there is no sound and no music, there are only periodic variations of the air pressure; 'out there' there is no heat and no cold, there are only moving molecules with more or less mean kinetic energy, and so on".

ENACTING BELIEFS

As has been shown from the example of Husserl, the phenomenological tradition suggests that the first-person perspective of beliefs is far from as simple as recalling a certain proposition that acts as a representation of the world. Enactivism (building on phenomenology) provides a framework for explaining beliefs without relying on representations. What is unfortunately lost with renouncing representations (and a third person perspective) is a relatively clear notion of what a belief is – the answer to the question: "What is it like to take something to be true?"

If Husserl's concept of the horizon is to be interpreted as being comprised of beliefs (as continuous and ineffable as they might be), and if an organism's sense-making could be interpreted as the organism constructing beliefs about the world, belief is everywhere (and closer resembling an uncountable belief-substance than a set of discrete beliefs) – indeed, being conscious of something would mean believing it[4]. This nigh-synonymity would call to question how much sense it makes to speak of belief from a first-person perspective at all. Or, perhaps, belief should be perceived as something more active like the product of what Husserl calls explication. But, again, what does this process look like? Does it involve an internal language of thought or maps or something else entirely? And, in reference to phenomenology and enactivism's focus on the importance of the body, is there a difference between believing there to be a room behind me as I am sitting behind my desk and believing that our solar system has less than 10 planets?

It is clear that we need to draw new lines in the sand, but also that we need to take a closer look at the sand itself – not by looking at other people's behaviour but by examining our own experience. Recently, experience research has been on the rise – both in the strictly philosophical sense and in a more empirically oriented sense, so called empirical phenomenology [15]. With the development of techniques for tapping into the resource that is human experience (e.g. [16-18]), there is hope that we might soon find some answers and perhaps uncover questions yet unimagined.

REMARKS

[1]I use the terms *to be aware of*, *to be conscious of* and *to experience* interchangeably.
[2]Regarding the use of first or third person, singular or plural in examples, there is great variety in the literature. Husserl [3], for example, uses the first person singular, Yoshimi [5] the first person plural and Dreyfus [7] the third person singular. I myself prefer using the

first person singular, so as not to presume that my experience is the same as everybody else's, and much less to assume what a third person experiences. Though, by quoting other authors, a constant switching between these styles is unavoidable.

[3]My previous examples regarding the horizon were not examples of genuinely experiencing the horizon, but rather examples of explicating certain properties of the horizon. This is similar to providing »our solar system has less than 329 planets« as an example of implicit belief, even though by reflecting on it, it is no longer implicit.

[4]An idea defended by Baruch Spinoza and later Daniel Gilbert [19] – sometimes referred to under the name of credulism.

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