

A Bergsonian Approach toward Phenomenal Externalism: Rendering Unity

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Abstract

Phenomenal Externalism (PE) is one proposed framework for resolving the problems associated with the intentional aspect of mental content. However, by privileging external objects over internal structure in identifying the characteristics of experience (qualia), PE is limited in its ability to explain the introspective (phenomenal) aspect of experience. This has become an Achilles' heel for PE, to which many of its opponents have formulated significant objections. In this paper, we consider some possible ways of modifying and equipping PE to answer these objections. It will be shown that a degree of subjectivity can be returned to the qualia conception within a PE framework. This will be achieved by following Bergson, who claims that perception is made *in* things and that, though not identical, pure perception and objective reality are united. To explain this unity, we propose a computer rendering analogy, according to which qualia look like the products of mental rendering, which raises the possibility of locating some phenomenal properties *in* things. On this modified view, on the one hand qualia turn out to be objective, in the sense that they are unified with external entities, and on the other hand they are subjective, since they are unified with the mind. To be “in” the thing in the sense discussed means being “united with” and “inseparable from” both the thing and the mind.

1. Introduction

The Mind-Body Problem is among the most controversial subjects in philosophy and science. Of the many proposed resolutions to the problem, Externalism is perhaps the most contentious. Externalism was first proposed as a way of identifying and individuating dispositional (intentional) mental

states, such as beliefs, not only in terms of intrinsic properties of the subject (as Internalists believe), but also in terms of features related to the environment that are external to the subject. Later, this was extended to encompass the qualitative character of experience in general, by way of a thesis known as Externalist Representationalism (ER) or Phenomenal Externalism (PE) (Shroer, 2009). In response, many objections to PE have been set out. Our focus in the present paper is on how PE can respond to these objections.

In attempting to resolve some of the difficulties involved in explaining phenomenal knowledge from a physicalistic point of view, PE proponents suggest, first, that all (Dretske, 1995), (Lycan 1996, 2001), (Byrne and Tye, 2006) or most (Kim, 2010) of the characteristic properties of experience (qualia) are representational and, second, that these properties should be identified with (or, in the strong sense, reduced to) a representational content that is somehow determined by or individuated with reference to the external object.

This account of the content of qualitative experience (qualia) has generated numerous controversies. The primary objection is that PE conflicts with our introspective intuitions about the phenomenality of experience (Schroer, 2009). In other words, PE cannot explain the subjectivity of experience by referring some or all of the qualitative properties of experience to the external object. To demonstrate this problem, several puzzles have been proposed, such as the Inverted Spectrum (Jaegwon Kim, 2010), Inverted Earth (Block, 1990), Far Star (Revonsuo, 2010), and the Dreaming Puzzles (Revonsuo, 2006). In each case, the problem is generated because the external object is supposed to be where qualia reside, thereby leaving no room for subjectivity. With the help of Bergson's theses, this paper shows how we might equip PE to deal with some of these objections and demonstrates that a degree of subjectivity can be returned to a "qualia" conception in a PE framework.

The next section introduces Bergson's theses. The discussion is based primarily on his *Matter and Memory* (1908). We then set out an account of how a modified version of these theses can help to resolve the problems associated with PE, especially the puzzles raised by its opponents. It is important to note that Bergson's views will be presented in a far more analytical manner than he presents in his own writings.

2. Bergson's Thesis on Mind and Matter: The General Scheme

Bergson's most significant claim is that pure perception¹ and objective reality (in Bergson's usage, "matter") are united. What exactly this unity amounts to is not clear, so in what follows we propose a clarification.

Bergson begins by criticizing the three mainstream philosophical traditions of his time: Materialism, Idealism and Dualism. He is inclined to accept the existence of both a mindful subject and a material object and their (mutually causal) interaction. Thus, he rejects matter as being secondary and/or dependent upon mind, and vice versa. Briefly, Bergson argues that for the materialist (or physicalist), every entity (or property) should be the result of states (position) and movements (momentum) of extended particles with dimensional properties (similar to Descartes). However, this leaves the emergence of subjective conscious experience, considered as a non-extended entity, as something miraculous and inexplicable. This is a problem many physicalists have struggled with, now known as "The Hard Problem" (Chalmers, 1995) or "The Explanatory Gap" (Levine, 1983).

On the other hand, according to Bergson, if we accept Idealism and suppose everything to be mental (dependent on, originating from, or existing in the mind), which for Bergson is non-extended and undetermined (relating to his belief in free will), then an explanation of mind-independent and determined material facts becomes impossible. Moreover, Bergson does not like the way science is accounted for in idealistic frameworks. He believes that the deterministic aspect of science is essential, since the gist of scientific theory is deterministic law. However, if the laws can be settled arbitrarily by mind, (empirical) science becomes accidental and undetermined. Thus, Bergson's account of science conflicts with the idealistic framework.² Having rejected Materialism and Idealism, Bergson tackles dualism in its Cartesian sense, namely, the positing of two distinct substances: the mental (immaterial) and the physical (material). For Bergson, the interaction between the two seems perplexing, and he thus rejects the Cartesian distinction.

Bergson accepts none of the above well-known hypotheses, and begins his own speculation with an eccentric rejection of a common intuition, with his statement that the "perception (of external objects and entities) does not

¹ It can be inferred from Bergson's writings that "pure perception" is the instantaneous impression occurring before the mind applies any interpretive or filtering process - an idea similar to Kant's immediate sensual impression or sensation (Giovannelli, 2011).

² This was well before the advent of non-deterministic quantum mechanics.

occur in our brain.” According to Bergson, our perception is *in* the object we perceive, rather than in us: “Perception, in its pure state, is, then, in very truth, a part of things” (Bergson, 1908, p. 64). Furthermore, speaking of a luminous point P perception, he contends that “the truth is that the point P, the rays which it emits, the retina and the nervous elements affected, form a single whole; that the luminous point P is a part of this whole; and that it is really in P, and not elsewhere, that the image of P is formed and perceived” (Bergson, 1908, p. 43).

Counter-intuitively, Bergson removes perception from the brain and locates (or expands it) outside the body, ontologically linking (uniting) perception with the objects that are perceived. In doing so, he attempts to avoid the weaknesses of each of the standard theses discussed above. Since he accepts the independence of mind and matter, Bergson circumvents the problems with the Monism (whether Materialism or Idealism) and, by transferring perception to the object, he aims to show that the interaction problem between mind and matter can be resolved, albeit within a dualistic framework.

Bergson criticizes the view of matter common to both Materialism and Idealism, which both treat it as being distinct from its corresponding conscious cognition (perception). In Materialism, matter differs substantively from the non-extended (conscious) cognition that miraculously arises out of extended (material) particles. In Idealism, matter is similarly assumed to be an extended entity governed by deterministic laws, whereas mind is non-extended and undetermined. Thus, like the materialist, the idealist has a conception of matter as substantially different from mind. Even for Kant, the possible objective entity (the material world) presumed to be the cause³ of perception is the unknowable *noumenon*. Again, this is dissimilar to the experienced perception.

Bergson rejects this conception, maintaining that things (matter in general) are what they seem, and are not independent of (or distinct from) perception. According to Bergson, pure perception and matter (or, more precisely, objective entities) are united, and perception is constructed out of pure perception as part of the objective entity. Therefore, how an object seems (i.e., the perception of it) is, in ontological terms, united with both pure perception and objective matter, not a distinct and uncertain representation of

³ For now, we shall ignore the objection that causality cannot be assigned to non-spatiotemporal entities, namely, the *noumenon* in Kant’s philosophy. Kant distinguishes two types of causation elsewhere. (See Kant’s *Prolegomena to Any Future Metaphysics*, section 30.)

the object. In other words, the perception of an object is a confined version of pure perception. Nevertheless, even if we grant this, how does Bergson explain the confinement process of pure perception?

2.1. Recognition and Memory

Bergson believes in a specific type of metaphysics, which he calls “positive metaphysics.” This is a form of metaphysics based not only on personal abstraction, but also grounded in empirical fact (Gayon, 2005), which is now known as “experimental philosophy.” Based on this belief, he considers memory and its role in cognition, viewing memory as the coincidence of matter and spirit (or mind). Bergson claims that recognition (perception) is the confinement of pure perception by the means of memory.

The key to understanding Bergson’s epistemology is that he sees perception and cognition as active processes. He does not see them as the passive flow from object to brain from which a conscious experience arises. A Bergsonian cognitive process is not an outside-to-inside (centripetal) process or the moving from object to idea (or subject), but an inside-to-outside (centrifugal) process, which moves from idea to object.

For Bergson, all perceptive durations are present in pure memory in the form of planes of consciousness. For each perception, memory retrieves some of these planes from the past and grounds them in the present moment, so that “the concrete process by which we grasp the past in the present is recognition” (1908, p. 90). Indeed, memory can make a choice⁴ according to the spirit’s needs. This is a recursive process: permanent perception is synthesized from ultimate reality by means of planes of consciousness, and the process continues until what the spirit needs is constructed out of pure perception (united with objective reality or matter). Bergson explains the active role of the recognition⁵ process as follows:

In principle, the present supplants the past. But, just because the disappearance of former images⁶ is due to their inhibition by our present attitude⁷, those whose shape might fit into this [our present]

⁴ To Bergson, this undetermined choice is the direct sign of the immateriality and spirituality of memory.

⁵ Bergson’s use of the term “recognition” in place of cognition is interesting.

⁶ For Bergson, “image” is a technical term and will be explained later.

⁷ “Attitude” here is almost synonymous with “need.”

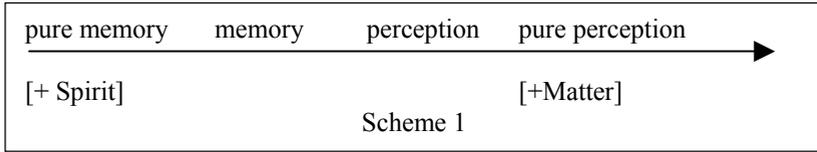
attitude encounter less resistance than the others . . . It is the image most similar to the present perception that will actually do so (1908, p. 96).

Unfortunately, Bergson does not explain this process analytically or develop it in the form of a precise cognitive model. However, it is important to note that for Bergson, the process of recognition is not additive but reductive – that is, nothing will be added to the pure perception to build a new perception; rather some planes of consciousness are hindered (by memory), and so do not emerge in the perception because they do not match with the present need. In other words, what we perceive is cut from pure perception according to need. By way of illustration, we can imagine objective reality or pure perception as a piece of marble from which pure memory extracts the statue by removing all non-essential parts. More precisely, memory works as a filter, constraining the emergence of what is not adjusted to one’s need. Bergson is now able to present the “hard problem” in a different form:

What you have to explain, then, is not how perception arises, but how it is limited, since it should be the image of the whole, and is in fact reduced to the image of that which interests you (Bergson’s italics) (1908, p. 40).

To better understand what Bergson means, it is important to note that he views things (entities) as “images” that are neither material nor ideal. Indeed, he calls all things images, since there is always a unified subjective (representational) aspect in their essence, in accordance with the limiting process explained above. This image-entitling will be explained later. However, the notion of an independent image is counterintuitive, since upon hearing the word “image,” we might reasonably ask, “What is the image an image of?” Bergson does not give an unequivocal answer, saying only that the basis of the image is not the idea, since it is independent of the mind (1908, p. 10). Therefore, following Bergson, we can say that the image is constructed out of, and unified with, pure perception. Thus, there is still a need for a clearer understanding of his notion of an image, especially in relation to ideas, pure perception, body, and matter.

Bergson's theory may be represented as follows:



The direction of the arrow indicates the flow of the active perception process from pure memory to pure perception. Perception is made out of the pure perception that resides in things (objects) based on the spirit's needs. On one side, pure perception is united with objective reality (or matter); on the other, pure memory is united with spirit.

In many respects, Bergson's theses about the unity of subjectivity and objectivity in things seem ambiguous, especially from an ontological perspective. However, for now, our purpose is not to assess or criticize Bergson's theory in detail. Rather, our purpose is the preliminary one of demonstrating how his ideas and premises may lead to productive debates about Phenomenal Externalism.

3. Comparison with PE

PE, in its strong sense, claims that the representational theory of qualia is wide, not narrow (Lycan, 2001); i.e., the quality of perception (representative content) lies outside the brain and *in* the external object. This is the idea of transparency (Herman, 1990) according to which only a sign (or pointer) of an object is present in the mind, and the experience of it should be identified and determined by the properties corresponding to the external environment (Kim, 2010). For advocates of PE, it is plausible to say that things are as they seem: "Qualia are, by definition, the way things seem, look, or appear to a conscious creature" (Kim, 2010, p. 255). Such an understanding of qualia amounts to the claim that "if things really are as they are represented in perception, they must have the properties they are represented to have" (Heiden, 2012, p. 99). Thus, in a sense, PE claims that qualia are objective or have some sense of objectivity, which is why Kim maintains that "Qualia [...] are among the objective properties of external objects presented in

conscious experience” (2010, p. 256). This objective account of qualia is the main target of those who object to PE.

In making a comparison between Bergson’s theses and PE, it is helpful to begin by acknowledging the similarities between them. Bergson implicitly accepts that things are as they seem to be, and that by recalling things as images, the qualitative aspect of experience is representational. Moreover, he claims that perception (qualia)⁸ lies in the things (objects) themselves.

However, Bergson’s claim that external perception resides *in* things differs from PE, insofar as qualia are not an objective property of external things; rather they are united with things, i.e., qualia are both objective and subjective in a way that is unified with the thing. More precisely, the perception of qualia is the product of the unification of subject (memory) and object (matter). Perception is the subjective construction of some objective reality *in* objective reality. This is a similar idea to PE, inasmuch as qualia reside in the object; however, unlike PE, Bergson’s view retains a degree of subjectivity. This is a crucial point to PE’s advantage. In the classic form of PE, for supposing qualia to be objective means that that qualia are identified with some objective aspect (property) of the external object (as for any other objective property such as charge or mass), there could not be another property (qualia) of the same type simultaneously corresponding to a single object. When one perceives a cup as green, according to classic PE, the greenness of cup experience resides in the cup. Therefore, the greenness is in the object and there could not be another color residing in the cup. When the quality of our experience extends to a single objective entity and somehow becomes identical with some aspect (property) of it, then that quality becomes objective. It cannot be dissimilar for different subjects. Therefore, different subjective perceptions of a single and unique entity become impossible. The identity hypothesis of qualia is where classic PE is most vulnerable. However, employing unity in place of identity leaves room for subjectivity. With the help of Bergson’s theses, the subjectivity of the experience can be reconciled with its objectivity. If one understands perception as being united but not identical with some aspect of the external object, then it is legitimate to assert that the active mind (subject) constructs what it wants out of the external object *in* the object. It is thus possible that the perception of a single object will be different for different subjects. To return to the question of how Bergson’s ideas can help with issues relevant to

⁸ It might be asked, “What precisely does Bergson mean by perception?” For now, though, we will assume that what is meant is identical to qualia.

PE, in the next section we show how those ideas can help to resolve the puzzles advanced by PE's opponents.

4. How can Bergson's ideas help resolve the puzzles of PE?

One of the puzzles designed to refute PE is known as the "Inverted Spectrum" (Jaegwon Kim, 2010). This puzzle supposes that there are two people, where one sees an object as green and the other sees it as blue, but where both describe the object's color using the same term. In this case, if it is supposed that the qualia lie in (or are individuated by) the object, how can it be that two colors (or whatever it is that the representational content corresponds to) reside in the same object at the same time? How can they be different if there is no external difference?

With the help of Bergson's theses, this objection can be answered. One subject, according to his particular attitude, constructs the color green out of the object *in* the object, as the characteristic of his own perception, and the other subject constructs the color blue. Thus, the perception of different colors from the same object, even if one supposes that both color qualia resides in the same object, becomes possible. A problem occurs when it is supposed that qualia are identical to some objective aspects of the object, in which case the object cannot be both green and blue. However, when the claim is altered such that the qualia now represent the object under subjective manipulation (by the unified active process of memory), then the issue does not arise. Different unification processes produce different qualia in the same object.

Another problem with externalism is known as the "Inverted Earth" puzzle (Block, 1990, Kriegel, 2007), which imagines a planet which is identical to Earth, except that colors are inverted. There is, in addition, a subject who wears inverted glasses that inverts the colors observed. As these inversions cancel each other out, what the subject observes will be equivalent to what would observe on Earth without the glasses. Therefore, the subject experiences the same phenomena on Earth and on Inverted Earth. However, if external representational content is granted, it should not be possible to experience two unlike objects identically, since the contents (the two objects) are inverted insofar as color is concerned (on two separate planets). The phenomenal aspect of the experience is supposed to lie in the different objects, and so cannot be identical. As with the previous puzzle, this is only a problem if we grant that the qualia are identical with some aspect of the corresponding external object, but if qualia are supposed to be united and not

identical with some objective aspect (property) of the object, then it becomes conceivable that the two observations could have the same quality of experience from two dissimilar objects.

One of the most powerful objections to PE is raised by the case of observing a star that no longer exists. Revonsuo gives the example of Betelgeuse, a red giant 600 light-years away from Earth (Revonsuo, 2010), which does not currently exist, even though observers on Earth still see it. If the qualitative content of conscious experience lies in the object, how can it reside in a non-existent object?⁹

A preliminary answer is that, although there is no star to see, there is still some physical entity as a substratum of qualia construction: photons or electromagnetic waves (field), for instance. Though the star might be unknown by its nature, photons (light) are part of the physical realm, and are as “real” as any object. Thus, although there might be no star, there is still its residue, the corresponding light,¹⁰ which is sufficient for the construction of the experience (qualia).

A second point, implicit in this objection, concerns the time relevant to the qualia or, more accurately, the temporal correspondence between the characteristic properties of the experience of an object and the object itself. This is, admittedly, a challenging objection, and it may be applicable not only to PE but to Representationalism in general, and extended to the qualia conception more generally. Does what we perceive as “now” correspond to a “now” in the physical world of which we are a part, and is there an absolute spatiotemporal framework which would allow us to compare them? According to special relativity, there is no such absolute framework. The measurement of space and time depend on the relative velocity of the frame of reference, and cannot be measured in isolation. However, even if we suppose that such a framework does exist, as Newton did, we would still have to find an answer to the objections of philosophers such as Dainton (2006) and Tye (2003) and the experimental evidences – coincidence limit (Ruhnau, 1995), “Phi phenomenon” (Kolers, 1976), and moving “dot-screen” (Paul, 2010) – which suggests that there is not a one-to-one correspondence between the supposed subjective ‘nowness’ and the objective ‘now’. There is

⁹ We can only suppose that the star does not exist, because information from Betelgeuse cannot travel faster than light, and light or another form of electromagnetic wave is the only known means by which we can receive information from Betelgeuse.

¹⁰ It is worth noting that we do not ‘see’ objects, but only the photons (or electromagnetic waves) emitted by or reflected from them.

always part of the past and part of the future in the perceived “now.” In other words, “past and present and future will be [re]presented simultaneously” (Dainton, 2006, p. 132), otherwise we could not have the experience of transition and movement. Thus, to address the PE problem of temporal correspondence, there is no need to mention the case of Betelgeuse, for our everyday experiences have the same temporal complexity. Whatever the distances involved, there is always a delay between the transmission of information and its perception, due to the finite speed of light and the cognitive processing time. Therefore, all experience corresponds to past time: there is no ‘now’ that corresponds meaningfully to the present.

However, according to Bergson, this can be explained. The object’s past state of affairs exists somewhere – namely, in memory. As Bergson explains, qualia arise from the process of perceptive construction and memory framework. Thus, a delayed construction would be possible. In the case of the non-existing star, memory can also aid the delayed mapping of perception of the light emitted by the star.

One other objection to PE is dreaming (Revonsuo, 2006). When dreaming, especially during REM¹¹ sleep (Rechtschaffen and Buchignani 1992), we experience entities that do not exist outside the brain. For PE adherents, explaining the existence of an experience without anchoring it in something external to the brain is problematic. Once again, the role of memory in recalling past experiences and in constructing a new representation can help. However, the following question remains: on which substratum will the qualia be established? However, while the problem posed by dream objects is challenging, it is surely less challenging than the problem of the distant star. Because dream objects are not supposed to be representative of objects outside the brain, they are internal representations, and can be plausibly considered to be constructed on the basis of the material – i.e., neurophysiological – foundation of the brain itself.

5. Discussion and Conclusion

The aforementioned examples, though only briefly examined, show that Bergson’s theses offer possibilities that might help us to resolve problems and puzzles for PE. However, some serious difficulties remain, and these are addressed below.

The first major problem lies in the nature of the unity of mind (pure perception) and matter (objective reality), out of which Bergson claims

¹¹ Rapid Eye Movement.

perception or cognition is constructed. How is this unity of subjectivity and objectivity possible? From a substantive dualistic perspective, it is difficult to unify the nature of the two, and makes sense only if property dualism is presupposed. In principle, a unity between two different properties of the same substance is conceivable, though in practice the exact process requires further clarification. Even so, granting this unity provides a veneer of subjectivity from the brain on, or in, every entity. Everything conceived of as an object has some phenomenal properties, and so may in some sense be said to be subjectively constituted. Therefore, if we accept that phenomenal characteristics of a perceived object, such as color, shape, and rigidity, reside ontologically *in* things, there should also be some sort of subjectivity (phenomenality) *in* them. Accordingly, the threshold of subjectivity should be extended beyond the head into external things, i.e., into whatever we perceive. This idea might be aligned with the claims of those who believe in an “extended mind,” and who use the term ‘coupling’ (Clark and Chalmers, 1998). The focus of Clark’s and Chalmers’s thesis is on the extension of a bodily vehicle to other external tools (e.g., a pen and paper or a notebook), rather than on an ontologically motivated extension to the brain (mind). On their view, external reality helps the brain (or body) in the formation of an experiences or in the accomplishment of mental tasks (such as mapping and navigation). However, Bergsonian unity, in a stronger sense, imply a realization of mind *in* the external objective world in a stronger sense.

The rendering process that is used in computer graphics is a useful example for the purpose of clarifying the unity thesis. Modelers in computer graphics (animations, games, etc.) begin by making a non-covered model, which consists of lines that represent polygons joint together to form a mesh. Then, by rendering this mesh of polygons, the object can be visualized (represented) on screen as a 2D or 3D object, with colors, materials, textures and other visual effects overlaying the mesh. How the object ultimately appears depends on the selected method of rendering (2D or 3D). Before rendering, the modeled object consists only of lines, and only after rendering does it look like a ‘real’ – that is, familiar – object. The rendering process causes certain visual aspects to be mapped *in* the object. Similarly, some phenomenal aspects might be construed as being represented, as with rendering, *in* the thing. In this way, qualia can be considered to be a product of the mental rendering of things, which results in locating some phenomenal properties *in* things.

However, an additional problem arises, which is the location of subjectivity “in” the object (thing). Suppose, for example, that an objective (absolute) space-time exists, and that it is independent of mind. If so, there should be an objective entity (the thing) “where” the qualia reside. If “in” is construed spatiotemporally, there should be a spatiotemporal location or region which is occupied by the corresponding “qualia” – and yet this is implausible, since it implies that qualia could be withdrawn from the thing and located elsewhere.

The other option is to claim that things are as they seem. One way of understanding this is to say that how things look is what they look *like*, which is tautological. There might be something more to the object existing outside of perception beyond the seeing or observing realm. In other words, mental (qualia) properties, which we might call “rendered,” are aspects of the thing identical to what the thing looks like to the observer. Things are rendered by the mind, and this process makes them appear as they do. It is important to note that to be rendered is not a locally distinct *part* of a thing, but is an *aspect* of the thing. Admittedly, this view departs from Bergson’s account, since he considers perception to be part of the thing, insofar as the “part” should not be understood as a spatiotemporal part but as an aspect of the thing, its rendered aspect. According to this view, qualia would be the product of the interaction (unification) of the ultimate mind (spirit, pure memory) and objectivity; an interaction that does not occur at a distance from the thing but is instead united with it.

By modifying the rendering analogy, the argument can be clarified. When a computer model is made, for example, it consists of ordered or structured codes in a program in the computer’s memory. Through rendering, this data is visualized as a recognizable object on the screen. Such data can be rendered (realized, visualized) as 2D or 3D objects or simply as a mesh of polygons. On-screen objects are what they seem, nothing more and nothing less. Similarly, if we review all the observable properties of external objects, such as color, rigidity, heat, shape or continuity, these are in some sense mental. They are mentally rendered as the visualized properties of a thing. They are produced by the unity of mind and material, which makes the thing look as if it exists where and how it exists; that is, these observable properties have aspects of both subjectivity and objectivity. The unity thesis entails that there are no qualia without an object (or a mind independent substratum), and no qualia without a subject. The qualia are the products of (and are determined by) the unification of mind and matter.

There remain questions about what the “thing” is, and where and how unity occurs. If the thing is as it appears to be, what about its unobservable aspects? To return to the rendering example, what is the object? There is, indeed, programming code ‘behind’ the rendered object, which is unobservable to the user (residing inside the memory), but is the object identical to what is visualized on the screen, what is represented in the user’s mind, or what resides as programming code in the computer’s memory? It might be claimed, of course, that the code is the unobservable aspect of the thing and the screen is where the unification occurs, and that what is known as an observable or visualized property is constructed there. Accordingly, the rendering process might be said to be the unity process. This is indeed a plausible analogy. Nevertheless, according to this view, objects or things are not as they seem; they exist principally beyond observability, entailing that the observed aspect of the object (on the screen) is located somewhere other than the main substratum of the thing. One might even claim that the screen exists within the mind, which would undermine the entire edifice of PE.

However, returning to the rendering process, the visualized part could not be separated from the code or the processes that run parallel to the monitor’s illumination. Similarly, the visualized object cannot be an object without a mindful observer observing it. Technically, there is no constant image or moving object on the screen at each instant. To cover and illuminate the screen, a point (electron beam) sweeps the screen through diagonal lines and, at each moment only one pixel is excited with a specific color. This process is repeated periodically in a specific temporal framework (frequency). Thus, there is no specific image on the screen at any instant, and nor is there a moving object. There is only an illuminated dot, observed by a mindful observer as a scene full of moving objects. It is the latency in our visual cognitive system which creates moving objects out of dots. Thus, the visualized object is neither separable from the observer nor from the programming code and the computer. The object is created from the whole interaction between mind and the programming code running within the computer. This could be construed as the meaning of unity in Bergson’s framework.

In a similar manner, things cannot be separated from mind or from the ultimate unobservable objective reality. The thing is constructed from the unified interaction of mind and matter. In other words, a thing cannot be considered independently of mind and matter, since both are actively engaged in its construction. At this point, it is worth citing Bergson’s discussion of the

formation of perception of a luminous point P: “The truth is that the point P, the rays which it emits, the retina and the nervous elements affected, form a single whole” (Bergson, p. 102). This *single whole* is what we should consider as object or thing. Therefore, the representational content is not merely in the thing, but rather “united” with the whole system from mind (brain) to the thing. One should attribute the qualia to the whole path containing the brain, sensors, photons and the thing. According to this approach, the qualia could be different for a single state of affairs in the ultimate reality (Spectrum Inversion puzzle) or, conversely, be the same for different state of affairs (Inverted Earth puzzle). Under this unified whole conception, the subjective object makes sense. On the one hand, qualia – or how the thing appears – are objective or individuated externally based on objective reality, inasmuch as they are unified with ultimate reality. On the other hand, qualia are subjective, since they are unified (rendered) with the mind. It should now be clear why Bergson uses the term “images.” In using this term, he seeks to emphasize the subjective aspect of the thing, like the image represented on the TV screen. Following Bergson’s tenet that perception is reductively constructed on the basis of needs, we can state that qualia are constructed from the ontological unity of mind and matter and are inseparable from either the thing or the mind. Thus, qualia may be supposed to be determined by both mind and matter in a unified manner and confined to neither. That is, neither Internalism, which holds that qualia are identified and determined *only* by internal (mental) features of subject, nor Externalism, which holds that qualia are identified and determined *only* by external objective features, reveals the whole truth about qualia. This account of “objecthood” as inseparable from and united with mind and matter can be aligned with the earliest versions of Representationalism, most notably Brentano’s conception of *Intentional Inexistence*: “Every mental phenomenon,” Brentano says, “includes something as object within itself” (1874, pp. 88-89). Thus, according to the proposed interpretation, “within” can be construed as “united with” and “inseparable from.”

It is worth noting that this approach, in which both external object and mind (mental states) are considered to determine (the content of) experience in a unified way, is not unique to Bergson. *Russellian acquaintance* (1917), described by Russell as having “*a direct cognitive relation to that object,*” has some similarities with Bergsonian unity. More recently, Langsam (2011) has considered ‘phenomenal property’ to be determined both by an act of consciousness and the observable properties in external objects. Thus, there

are philosophers who sympathize with the approach outlined in the present paper. Moreover, the puzzles and problems we have discussed illustrate that there is potential in the proposed interpretation of Bergson's philosophy which we have here described as "rendering unity." This approach is worth considering as to a response to some recent controversies surrounding PE. While there are undeniably challenging problems in Bergson's theses, especially as regards his arguments concerning the object's referent and the question of subject-object unity, in this paper we have tried to clarify some central issues in Bergson's philosophy and to suggest some ways in which it may be usefully applied to what remains, by broad consensus, "the hard problem" in philosophy.

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