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ORIGINAL ARTICLE

Peter Hacker on forms of representation: A critical evaluation

Hektor K. T. Yan

University of Wales Trinity Saint David, Lampeter, UK

Correspondence: Hektor K. T. Yan, University of Wales Trinity Saint David, College St, Lampeter SA48 7ED, UK.
Email: hektor.yan@uwtsd.ac.uk

Abstract

P. M. S. Hacker's tetralogy on human nature (2007–2021) is a recent contribution to philosophical anthropology. In this work, the expression 'form of representation' appears at crucial points of discussion. This paper begins with an exposition and analysis of this notion, followed by a look at how it is utilised in the discussion of knowledge, the mind, and other emotive and moral concepts. It then turns to a comparison of 'forms of representation' with two important concepts, namely, analogy and metaphor. To offer an evaluation of 'forms of representation' as a critical tool, this paper examines the increasingly common tendency for humans to identify with their brains.

I | BACKGROUND AND INTRODUCTION

What does it mean to say that a human being has a mind and a body? Is it true that knowledge is something we can acquire, keep and pass onto others? Are reason and emotion opposed to each other? Does it make sense to say that 'I am my brain'? These are no doubt philosophical questions that have puzzled generations of people, and philosophers over the ages have responded to them using different conceptual resources. What is noteworthy about these questions is this: In addition to the questions concerning whether claims such as 'I am my brain' is true, one must also address the question of sense, that is, what do the claims mean or whether they actually make sense. This issue of sense is intricately related to how we talk about or describe various entities such as the mind, knowledge, reason, emotion, and the like.

In his recent tetralogy on philosophical anthropology,[1] Peter Hacker employs the expression 'form of representation' repeatedly. This same term also appears in another one of his recent books:

> A form of representation is the constant form in which we represent certain kinds of things, a form which may well be at odds with the logical character of what is represented. When we speak of *having a pain* in our foot or of there *being a pain* in our foot, as opposed to speaking of our foot's *hurting*, we represent pain in the form of an object. But, of course, pain is not an object of any kind. Similarly, when we present the number of things in nominal form, as when we say that the number of moons of the earth is one, we approximate representing numbers in the form of objects. Then, like Frege, we're misled into characterizing numbers as abstract objects. But they're not objects of any kind. We represent the mind as a possession, as something we *have* or *possess*, for we speak of *having a mind*, and of *losing* one's mind. We speak of knowledge as something we *acquire*, which we may *pass on to another* and *share* with another or *keep* to ourselves. We speak of memory as *a storehouse* in which we *keep* information and where we *store* our memories. We present thinking in the form of an *act* or *activity*, as when we order someone to think, or tell another not to interrupt one's thinking.[2]

Instead of concentrating on how to *define* terms such as knowledge, emotion or reason in terms of necessary and sufficient conditions, he invites us to turn to how some key concepts are *represented*, *depicted* or *described*. This philosophical interest that centres on various 'forms of representation' around us will be the focus of this paper. In what follows, I will first try to clarify what a 'form of representation' is, with reference to some examples. This is followed by some comparison between 'forms of representation' and other concepts, especially what is known as a 'picture' and metaphor. To offer a critical evaluation of the usefulness of Hacker's 'form of representation', I will turn to one case study: This pertains to the increasingly common tendency for human beings to identify with their brains. As a prominent commentator on the works of Ludwig Wittgenstein, the former's influence on Hacker's writings can be felt everywhere. However, a general examination of the precise connections between Wittgenstein and Hacker lies beyond the scope of this paper: It concentrates on Hacker's arguments and ideas as they stand. References to Wittgenstein in this paper

[1]The tetralogy:
[2]P. M. S. Hacker (2019). *Intellectual Entertainments: Eight Dialogues on Mind, Consciousness and Thought*. London: Anthem Press, p. 36.

are therefore meant to elucidate Hacker's points of views: this leaves open the possibility that Hacker's views can diverge from Wittgenstein's (2009).[3]

II | 'FORMS OF REPRESENTATION': AN EXPOSITION AND ANALYSIS

While the term 'form of representation' appears at important junctures in Hacker's four-volume work, it is useful to note that it is not exclusive to Hacker or philosophers working in the same tradition. Consider the following passage:

> A form of representation… is a notation together with an interpretation of the notation, and we use a great variety of these: algebras, alphabets, animations, architectural drawings, choreographic notations, computer interfaces, computer programming languages, computer models and simulations, diagrams, flowcharts, graphs, ideograms, knitting patterns, knowledgerepresentation formalisms, logical formalisms, maps, mathematical formalisms, mechanical models, musical notations, numeral systems, phonetic scripts, punctuation systems, tables, and so on.[4]

With the long list of examples offered above, one may raise a question in connection with Hacker: Is Hacker's use of the term 'form of representation' compatible with it? In other words, it might be useful to know whether Hacker would acknowledge things such as maps, diagrams and musical scores as 'forms of representation', or whether his use of the term in philosophical discussion makes it distinct from ordinary usages. One thing is certain: Hacker tends to use the term primarily to refer to representations of *abstract* entities, as opposed to tangible entities such as landscapes (as in maps) or buildings (as in architectural drawings). In his writings, the examples of entities or things that get represented via 'forms of representation' range from the mind, memory, thinking and knowledge, to emotion, friendship, erotic love, and the human being. These are definitely things that we do talk about, and we can also describe them in various ways: Hence his claim that a 'form of representation' is the regular and common manner in which human beings represent or portray things.

We are not yet in a position to understand what a 'form of representation' means—although most of us possess the concept of representation (or what it is to present something through the medium of something else), it is not immediately clear as to what amounts to a *form* of representation. To say that there is a representational

[3]As an example of how the notion of a 'form of representation' is applied elsewhere, see O. Kuusela (2005). "From Metaphysics and Philosophical Theses to Grammar: Wittgenstein's Turn." *Philosophical Investigations*. Vol. 28, pp. 95–133.

[4]D. Peterson (1996). "Introduction." In D. Peterson (ed.), *Forms of Representation: An Interdisciplinary Theme for Cognitive Science*. Exeter: Intellect Books, p. 7.

form for *x* seems to involve the following schema: *x* is presented by *S* (a human subject or a community of humans) as *y*.[5] While *y* can be said of *x*, it need not be an attribute exclusive to *x*; it does not need to function like a definition of *x* either, for the representational form can take shape to the extent that *S* is inclined to *associate* *x* with *y*. As a form of representation acts as an aid for *S* to understand *x*, *y* tends to be concepts or phenomena that are more general and readily graspable than *x*.[6] Take Hacker's discussion of knowledge as an example. If we understand knowledge as something that can be acquired or possessed, we make the implicit assumption that knowledge is some sort of object. This means that the object (*y*) has come to represent knowledge (*x*) due to the fact that knowledge *resembles* the object due to its potentiality to be owned and transferred. In concrete terms, this allows one to respond to the question, 'How can I gain knowledge?', by saying, 'You get it from your parents, teachers or various educational institutions'. Note that this is far from a *definition* of knowledge, because the class of things that can be likened to objects is far too large, and many of such things are clearly not cases of knowledge. Still, this way of speaking is not useless; for it can offer humans some grasp regarding what knowledge is.[7] Still, this view of knowledge can lead to further issues. Consider this: When *A* shares knowledge with *B*, does *A* get to 'own' less knowledge afterwards? Or is it the case that *A* 'keeps' as much knowledge after the act of sharing? Note that these are not trivial questions, especially when we need to think about how education should be conducted and how knowledge is 'produced': It is because people's actions and their attitude to one another will be affected by how they see knowledge.

This explains why a 'form of representation' can have the potential to mislead us and create conceptual confusion. Since a 'form of representation' provides humans with a quick and easy route to grasping what a concept is, it has the potential to structure their understanding of the concept in a pre-reflective sense, thus foreclosing alternative ways of understanding the same concept. From this perspective, a form of representation resembles definition in terms of genera and differentiae: It points out

[5]Different components of this schema can be used to further analyse the concept of representation. For example, regarding *S* (the subject), one can look into the fact whether *S* presents the entity in question consciously or unconsciously, or whether *S* has any choice in the matter. One may focus on *x*'s relationship to *y*: for it can be formal, substantial or symbolic. The context where *x* is presented by *S* as *y* can also be examined to understand the purpose or function of an act of representation.

[6]Consider examples of metaphors such as 'Juliet is the sun' or 'I am the good shepherd'. Here, what is more simple and concrete seems to form the basis for depiction. In other words, the 'source', which is something we know of, or what is more familiar to us, is used to depict the 'target'.

[7]Would it make sense to say that 'justified true belief' is a 'form of representation' for knowledge? I am inclined to say 'No' for two reasons. (1) Using 'justified true belief' as shorthand for knowledge presupposes some understanding of belief, truth and justification, and also their interrelationship. No matter whether 'justified true belief' can serve as an adequate definition of knowledge, it does not offer us any straightforward answer as to roughly what sort of thing knowledge is. (2) A person who has never come across the expression 'justified true belief' may still be able to state that knowledge is something we can possess, keep, pass onto others and so on. This suggests that possession as the form of representation is embedded in the way (at least some) human beings talk about or refer to knowledge. It is not a theory, hypothesis or definition which can be rejected or retained in response to findings or evidence. Rather, it is part of the conceptual framework whereby some people make sense of the notion of knowledge.

what a thing is via the *category* to which it belongs, minus the quality that makes it distinct from other members within the same category. Thus, when knowledge is seen as something that can be possessed, we categorise knowledge alongside other things that can also be possessed (such as information, memory, opinion, and so on). One can, of course, see knowledge as something that can be possessed; the fundamental issue is concerned with the potential risks that come along with this *conception* of knowledge. As 'forms of representation' can be applied in different contexts and in the service of different purposes, there is no a priori means to understanding their significance. This is why the connective analysis offered by Hacker can be used as a counterweight to specific 'forms of representation' that can obstruct our understanding of concepts.

To further clarify how a 'form of representation' works, let us spend more time on this question: What does it mean for a form of representation to *represent*? The distinction between formal and substantial representation may help here.[8] Representation can take place when person A represents person B as a representative of B, as in the case where B appoints A to be her representative in, say, a legal or business meeting. In this context, the fact that A can represent B lies in a formal relationship between A and B, namely, what sort of relationship exists between the two. In concrete terms, this pertains crucially to whether B has made the necessary arrangements (such as a valid authorisation or declaration) with A to allow A to act as a representative. For Hacker's talk of representation when it comes to 'forms of representation', this sort of formal representation is absent, due to the fact that ideas and concepts are not agents that can arrange formal relationships or initiate authorisation or the like. It is therefore more appropriate to focus on substantial representation instead. This type of representation goes beyond formal (relational) arrangements, because there is actual resemblance between the representation and what is being represented. In other words, if *x* represents *y* (by *S*) in a substantial sense, the connection between *x* and *y* is not arbitrary or external: *x* resembles *y* in important ways, or at least some significant characteristics of *y* can be discerned in *x* as well—it is precisely such substantial similarities that allow *S* to use *x* to stand for *y*.[9]

III | EXAMPLES OF APPLICATION: THE CASES OF THE MIND, THE EMOTIONS AND THE SOUL

To see how Hacker applies this notion of a 'form of representation', consider his discussion of the mind. To many people, including prominent philosophers and scientists, to find out *what the mind is* is a question of ultimate significance. This

[8]H. F. Pitkin (1967). *The Concept of Representation*. Berkeley, Los Angeles and London: University of California Press.
[9]See also the illuminating discussion of representation in music in A. Ridley (2004). *The Philosophy of Music: Theme and Variations*. Edinburgh: Edinburgh University Press, Chapter 2, 'Representation', pp. 47–69.

has led them to posit different hypotheses as to what the mind is. Centuries ago, Descartes took it to be an immaterial substance. It seems that, in recent years, a form of mind-brain identity theory has gained acceptance. Whether this has something to do with the popularisation of neuroscience is subject to debate. At any rate, the idea is simply this: The mind is really the brain. And it is the brain that thinks, calculates, makes decisions, recollects, and so on. Although Hacker resists Cartesian dualism and also mind-brain identity, his own take on the issue is more radical. Rather than trying to identify the mind with entities such as the immaterial soul or the human brain, he urges us to look at the concepts carefully and at how they are framed, that is, in what ways they are portrayed or depicted. Using such an approach, he points out that the confusion stems from the fact that the mind is presented as an *object*. As an alternative, Hacker urges us to reconsider our way of speaking and talking: Despite our readiness to see the mind as an object, all the references to the entity known as 'the mind' can be rephrased as depictions of specific human *powers* for thought and other related abilities (such as apprehension, judgement and reasoning). Once we feel that we are not compelled to think that the mind is a *thing*, certain philosophical puzzles, such as the *relationship* between the mind and the body, would simply dissolve.

It has to be admitted that Hacker's take on concepts such as the mind and knowledge (by applying his notion of a 'form of representation') can sound controversial. After all, it is related to some of the most central debates within philosophy. To help us to fully make sense of his position, let us take a look at two other examples: One about the emotions and one related to the soul. Hopefully, these can illustrate Hacker's position because they appear less complicated and more straightforward.[10] Hacker discusses a variety of emotions such as anger, envy, shame and guilt in *The Passions* (the third volume of his tetralogy). As far as I can tell, Hacker's treatment of the emotions is broadly Aristotelian: which is to say that the emotions have an important cognitive element. While an emotion can be connected to external stimuli or somatic disturbances, its occurrence cannot be explained by (or reduced to) causal mechanisms alone. It is because the human being who experiences the emotion of fear, say, needs to form some belief about the sort of danger or threat they are experiencing: The fear must have an *object*. With this element of belief, it is also possible for him or her to assess and evaluate whether the object merits fear or not.

There are important implications when Aristotle applies this to the study of the emotions. To him, excellence or virtue (*aretē*) lies in responding to the object of one's emotion (such as some danger or an individual) at the right moment, at the right place, according to the right amount and intensity, and so on. (He would say that the fear of spiders, which is fairly common, falls short of virtue. Given the harmlessness of most spider species, it is inappropriate to react to them with fear). The resulting

[10]Alternative examples from Hacker include *Atē*, friendship in Aristotle and the Augustinian (Christian) take on sexual drive.

position is known as the 'doctrine of the mean': Concerning our need to face different sorts of risks and perils in life, the appropriate emotion to have is courage, which is an intermediate between the excesses of fearlessness and cowardice.[11] While Hacker, too, accepts a cognitive view of the emotions, he diverges from Aristotle at this point:

> Aristotle applied his doctrine of the mean not only to the virtues, but also to the emotions. He thought that all emotions come in triplets of excess, deficiency, and propriety, these being connected with parallel triplets among the virtues and vices. So there is one way of hitting the target and two ways of missing it. What he is doing, I believe, is imposing a form of representation upon his descriptions of the emotions – a constant pattern in terms of which to represent them (as we represent knowledge as a possession, pain as an object, thinking as a process). It is not the result of examination of the emotions, nor is it the result of analysis of the concepts of the emotions.[12]

What Hacker has done here is entirely consistent with his approach of connective analysis, which aims at reaching a surveyable overview of how concepts are deployed in different circumstances. To him, it is one thing to point out that one acts badly when an emotion takes hold of one in an excessive manner, it is quite another to expect all emotions to fall under this triadic schema of the mean, excess, and deficiency. For, it is questionable that the emotions, in their rich variety, can all be analysed or understood using a single method. Consider the following: Can one feel *Schadenfreude* in an appropriate manner, between the two extremes of excess and deficiency? Is it possible to find the right actions as a means to defending the 'honour' of one's family? What objects fall within the 'appropriate' range of erotic desire? Can offensive speech cause a 'right amount' of offence among people? What does it mean if a language has an emotion which has no name in our own? More importantly, the problem of the Aristotelian doctrine of the mean lies in its ability to obscure or marginalise other conceptions of emotions that are incompatible with it. (Hacker briefly discusses the older Homeric conception.[13] One can also consider the emotional effects of some irreversible or 'tragic' dilemma on the victim.)

Before I turn to the comparison of 'forms of representation' with other concepts, one last example deserves some brief treatment: This concerns Hacker's use of the soul as a 'form of representation' for the human being. He writes:

> Human beings have a soul. That is not an empirical statement, but a constitutive (grammatical, conceptual) one. It characterizes the nature of

[11] See *Nicomachean Ethics* for his discussion of the virtues. *Rhetoric* Book II contains key information on how the emotions are conceptualised within the Aristotelian framework.
[12] *The Passions*, p. 81.
[13] *The Passions*, pp. 74–77.

> mankind, as does the statement that human beings have a mind. These are not informative propositions, but explicative ones. They constitute a form of representation – our way of thinking and reasoning about ourselves – and belong to our methods of representation. They may serve to remind one that if a creature can be said to be a human being, then it follows that it can *intelligibly* be said to have a mind and a soul. This is, in effect, a grammatical proposition, a rule for the use of the expressions 'human being', 'mind', and 'soul'.[14]

Having defended the view that the soul he is referring to is not an immaterial substance, Hacker goes on to discuss the connection between the soul and the ethical dimension of human beings. This also allows him to point out that the death of the soul signals moral depravity and evil. This use of the soul as a 'form of representation' is therefore constitutive of the view that a human being is not only a sentient and rational being, but also a creature of spiritual depth. In a rather illuminating way, Hacker also mentions that the use of the soul to characterise the human is not universal: Instead of talking about evil by referring to the death of the soul, the Hebrew tradition resorts to the talk about the loss of the image of man, which is the image of God.[15] This shows that 'forms of representation' need not always be sources of philosophical confusion; they can be the necessary ingredients of a fruitful understanding of human life across different cultures. Another possible 'form of representation' for the human being, the brain, will be discussed towards the end of this paper.[16]

IV | 'FORMS OF REPRESENTATION' COMPARED WITH OTHER CONCEPTS

The above discussion gives us a taste of how the notion of a 'form of representation' allows Hacker to dispute the standard way we (as philosophers or language-users)

[14] *The Moral Powers*, p. 135.

[15] *The Moral Powers*, p. 154, footnote 20. In response to Hacker's unanswered question as to what 'Far Eastern' cultures can offer in lieu of a soul as a means of characterising the human (*The Moral Powers*, p. 130 footnote 4), one could turn to Confucianism. One of the cardinal Confucian virtues is *ren* (often translated as 'benevolence'). As a written character, *ren* is a compound of the logogram for human *ren* and the number two. The notion of interaction that involves two people is therefore embedded in the character for the virtue of benevolence. Since *ren* the virtue is also a homophone to the human (*ren*), the deep connections between the two concepts make it immediately intelligible to say that a lack of *ren* the virtue signals a lack of humanity. This resembles the proximity between 'the human' and 'the humane' in English.

[16] As another possible form of representation for the human being (in the context of social interaction), consider the following: 'What I have thanks to money, what I pay for, i.e. what money can buy, that is what I, the possessor of the money, am myself. My power is as great as the power of money. The properties of money are my—(its owner's)—properties and faculties. Thus what I am and what I am capable of is by no means determined by my individuality'. K. Marx (1844). "Economic and Philosophical Manuscripts." In D. McLellan (ed.) (2000), *Karl Marx: Selected Writings*. New York: Oxford University Press, p. 118.

look at things. By looking into the representational form a concept takes, he can question the question, 'What is the mind?' If our habitual ways of speaking about and describing the mind mislead us to look for the mind in the wrong place, we are better off switching to a different perspective. Hacker's arguments, based on the notion of 'forms of representation', are not only sophisticated; they also have huge potential because they seem readily applicable to different areas of enquiry. Before this route is taken, a few questions should be raised. I will now deal with issues regarding the conceptual character of 'forms of representation'. In particular, I will compare a 'form of representation' with other concepts. Then I turn to some concerns about their application.

It is noteworthy that a 'form of representation' is used in the writings of Wittgenstein, as the equivalent of *Darstellungsform*.[17] The English term 'form of representation' is used in a passage in what is known as the *Brown Book*, where he talks about a specific 'form of representation' we adopt.[18] In the *Philosophical Investigations*, *Darstellungsform* appeared twice, while the comparable terms 'form of expression [*Ausdrucksform*]' and 'mode of expression [*Ausdrucksweise*]' are also employed to refer to how we describe or talk about something. Before we discuss how 'form of representation' comes to be a key concept in Hacker, let us briefly consider a passage from the *Philosophical Investigations*:

> Thinking is not an incorporeal process which lends life and sense to speaking, and which it would be possible to detach from speaking, rather as the Devil took the shadow of Schlemihl from the ground. —— But in what way "not an incorporeal process"? Am I acquainted with incorporeal processes, then, only thinking is not one of them? No; in my predicament, I helped myself to the expression "an incorporeal process" as I was trying to explain the meaning of the word "thinking" in a primitive way.
>
> One could, however, say 'Thinking is an incorporeal process' if one were using this to distinguish the grammar of the word 'think' from that of, say, the word 'eat'. Only that makes the difference between the meanings look *too slight*. (It is like saying: numerals are actual, and numbers are non-actual objects.) An inappropriate expression [*Ausdrucksweise*] is a sure means of remaining stuck in confusion. It, as it were, bars the way out (PI, section 339).[19]

[17]For example, see *Philosophical Investigations*, Part I, sections 122 and 158.

[18]Discussed by Hacker in *Human Nature: The Categorical Framework*, pp. 98–103.

[19]For a study on how philosophical puzzles can be dissolved through grammatical investigation, see M. McGinn (1997). *Routledge Philosophy Guidebook to Wittgenstein and* The Philosophical Investigations. London and New York: Routledge.

Here Wittgenstein is discussing how a way (or mode) of expression (*Ausdrucksweise*) can lead to confusion. This usage of the term coheres with how 'forms of representation' are employed in Hacker: It forms part of some primitive attempt to capture the nature of a word or an abstract idea, but it turns out to be somewhat inappropriate. In the same manner, Hacker emphasises the dangers in construing the mind as a thing, or seeing memory as some sort of storehouse. One could further explore the usage of different 'forms of representation' or 'forms of expression' in connection with the notion of the 'primitive'. It is because there tends to be a specific *direction* concerning the characteristics of 'forms of representation' in Hacker. Let me explain: When he points out that we have the habit of giving knowledge a representational form of possession, we can see that something simpler and therefore more primitive (i.e. the object) is being used to construe knowledge, which is a more complex phenomenon. From this perspective, the 'form of representation' is marked by a return to something relatively more basic and fundamental; hence, it makes sense to talk about the direction from the complex to the general. The same process of redirecting to something simpler and more immediate can be discerned in Aristotle's conceptualisation of emotion: Instead of developing a full-blown account of the emotions with reference to ethical norms, customs, obligations, principles, and the like, the 'form of representation' provided by Aristotle is essentially a *quantitative* one. It is akin to some heuristic device that simply advises one to go for the 'middle'—not unlike the Delphic saying that recommends 'nothing in excess'—the prospect of engaging in a long and complex process of reasoning is replaced by a more reassuring, but *mechanistic* picture.

What differentiates Hacker from Wittgenstein seems to be the relative weight given to 'forms of representation': While Wittgenstein discusses the numerous ways in which language can confuse our thinking, Hacker seems to think that a type of misrepresentation lies at the heart of some philosophical problems:

> We possess the concept of thinking. We apply it unreflectively and correctly in our daily discourse. But we have no clear *conception* of what thinking is – and when confronted with conceptual questions about the nature of thought, we flounder and falter. For we have a mistaken *picture* of thinking – we *represent* thinking to ourselves in misconceived ways.[20]

This offers us some clarification as to what it means to possess a concept, a conception and a 'picture' (at least according to Hacker). While it is possible to have a concept of something, say, thinking or knowledge, it is also possible *not* to have a precise conception of it. In other words, a person can speak about thinking or thought and apply related terms in a trouble-free manner. Problems emerge the moment we begin to deal with issues about the nature of thought: Our pre-reflective way of talk-

[20] *The Intellectual Powers*, p. 356. See also the references to the 'picture' in *Philosophical Investigations*.

ing about thought and thinking, based on how we customarily represent them, may no longer be useful in philosophical thinking. Recall my remarks on definitions in terms of genera and differentiae. If 'forms of representation' can be likened to this type of definition, they are fundamentally outgrowths of our manners of categorisation. If this is the case, then one ought to be reminded that categorisations serve specific purposes, and that a way of categorisation in one domain may not serve the purpose in a different domain. Take a look at knowledge in the contemporary world: In the sphere of market transaction, it is no doubt possible to *assimilate* knowledge to other commodities such as cars and televisions—all these things are treated as objects in significant ways. Problems appear when the representational form of knowledge as object obscures other important dimensions of knowledge, as exemplified by the crude expression 'knowledge transfer': This creates the illusion that knowledge could be 'produced' once and for all and then 'transferred' to other 'users' and 'consumers'. Such ways of speaking make us forget about the contested nature of knowledge, and how power can legitimise certain forms of knowledge while marginalising others.

Now, it seems obvious that, for Hacker, a 'picture' is very much comparable to a 'form of representation'. This recalls Wittgenstein's remark that 'a picture held us captive'.[21] To paraphrase, this refers to the scenario where a particular conceptualisation of something gains dominance over our thinking regarding it: We are therefore unable to look away (metaphorically) and consider alternative ways of conceptualising it. This explains why, for Hacker, the expression 'form of representation' can be used interchangeably in connection with 'picture'.

This discussion of 'forms of representation' in connection with 'pictures' reminds us of a common tendency among human beings, that is, we struggle to maintain an overview of how words and concepts function in human life. When dealing with something abstract, such as memory or knowledge, it is easy for us to try to conceptualise them as something more familiar to us, namely, tangible objects. After all, our evolutionary history strongly suggests that our contact with the world began with the physical environment of objects—what is literally at hand. And abstract ideas and entities came onto the scene only with the development of language. This also brings to the fore another important mode of thinking, that of analogy or metaphor.

The urge to understand one thing in terms of something else is a deep one. If we employ the concept of space to understand time, in particular what is known as the 'passage' of time, we could say that a type of analogy is being employed. It is because the concept of space, of which the vast majority of human beings have some grasp, is familiar to them. This more familiar idea is therefore utilised by them to make sense of a less familiar and more abstract idea, namely, time and its 'passage'.[22]

[21] See *Philosophical Investigations*, section 115 and 114.

[22] Alternatively, consider the use of myths to explain phenomena such as evil or death. To say that these were brought about by some sort of human mistake (by Eve or Pandora) places the reality of such phenomena within a well-known narrative, namely the claim that bad things result from human error. Here one can see that the familiar fact of human fallibility is used to understand the mysteries of evil or mortality.

Another way to describe this is to resort to the notion of metaphor. In a classic study of metaphors, Lakoff and Johnson write: 'The essence of metaphor is understanding and experiencing one kind of things in terms of another'.[23] According to this formulation, Hacker's claim that a possessive form of representation is used by humans to represent knowledge amounts to the metaphor KNOWLEDGE IS POSSESSION. Although Hacker argues emphatically that understanding knowledge as something that can be possessed can lead to conceptual confusion, Lakoff and Johnson readily admit that metaphors play a fundamental role in shaping the way we think about ourselves and experience the world. Having documented the various ways metaphors structure our experiences and actions, they further point out that metaphors have the potential to hide something important us. It is because using a particular idea, say possession (also called the 'source'), to understand knowledge (the 'target') will inevitably highlight the thing-like characteristics of knowledge, thereby obscuring the *dissimilarities* between knowledge and ordinary objects of possession (such as tables and chairs).

The discussion so far should have demonstrated how 'forms of representation' are employed by Hacker to understand philosophical confusions in different areas: We have prima facie grounds to think that some common or constant 'form in which we represent certain kinds of things' are muddling our understanding of important phenomena. To offer a critical evaluation on Hacker's views, I will focus on two specific questions. The first one pertains to whether Hacker is right to think that the way we speak or talk about certain entities, which is essentially a linguistic inclination, is *in itself* a source of philosophical confusion. This is a central question about the overall orientation of Hacker's *Human Nature* tetralogy: By emphasising the need to present a comprehensive overview of how concepts are used in different situations and contexts, Hacker is addressing the philosophical problems that result from certain ways we use language by resorting to something within language, namely, what is known to him as connective analysis. The implicit assumption is this: Philosophical problems stem from language, and they need to be addressed by some linguistic manoeuvre. The second question is about how far Hacker is prepared to reapply forms of representation to understand other issues that arise from the way we describe and talk about various things. In other words, I want to know whether he is applying the expression 'form of representation' across different cases in a consistent and coherent manner. This will be discussed in the next section.

It is a long-established idea that metaphors can be used for literary or rhetorical effect: This happens when an idea from one area is employed to make sense of something else. Lakoff and Johnson's work on metaphors is important because it gives us grounds to think that there is more to metaphors than this. A key insight from *Metaphors We Live By* is the view that some metaphors are so *fundamental* to humans that it is inconceivable how they can talk about certain experiences or phenomena

[23] G. Lakoff and M. Johnson (1980). *Metaphors We Live By*. Chicago and London: The University of Chicago Press, p. 5.

without resorting to them.[24] Consider the view that what is high up is often associated with a positive state or an affirmative mood. 'He is having a high'. 'Her performance left her feeling on top of the world'. 'Greg's career has reached its apex'. It seems impossible to express the same thing without holding on to some spatial metaphor of height. The reverse is equally true: Being in a lowly state signifies something deficient or less-than-optimal. Hence such expressions as 'We have rock-bottom sales this year', 'This is a downward spiral', 'Events have taken a downturn for her', and so on.[25] By noting that this type of 'deep' metaphor has a close connection with the bodily nature of human beings, Lakoff and Johnson show that our use of metaphors is not a self-contained linguistic practice. As an animal that can stand upright, standing up and being able to reach for something high up signals well-being, active agency and being in control. The opposite, which is crouching or lying down, is a sign of inactivity, passivity or even sickness. This metaphorical connection between bodily posture and well-being can further extend to the moral sphere: This explains why expressions such as 'upright' or 'lofty' can acquire ethical significance. This transfer of metaphorical meaning from one domain to another can escape our notice precisely because it can appear 'natural': that there is some continuity and similarity between posture, well-being and moral goodness does not appear arbitrary.[26]

This shows that some metaphorical ways of speaking, especially the 'deep' ones mentioned above, are clearly not free-floating linguistic practices. Instead, they are very much connected to our evolutionary history, psychological make-up, social structures, and so on. At this juncture, one must re-examine 'forms of representation' in Hacker in the same light: Are they just ways of *speaking* and *talking* that may take one form or another? Or are they practices that are embedded in some human 'form of life'? Following Wittgenstein, Hacker can no doubt argue that the ways we speak or talk have intimate connections to the way we live—for it is only within the contexts of human life that one can grasp the meaning of what people say. What seems implausible to maintain, for Hacker or anyone, is the view that the ways we speak or talk, on their own, when they are disconnected from other practices within human life, can generate significant philosophical confusions. If 'forms of representation' are seen to be similar to the kinds of metaphors that interest Lakoff and Johnson, their power to

[24]Cf. *Philosophical Investigations*, part II, 278: 'The secondary meaning is not a 'metaphorical' meaning. If I say, 'For me the vowel *e* is yellow', I do not mean: 'yellow' in a metaphorical meaning—for I could not express what I want to say in any other way than by means of the concept of yellow'.

[25]As an alternative, consider the use of terms such as 'see', 'grasp' or 'follow' as means to signal one's understanding of something, hence the expressions 'I see', 'she struggles to grasp the point' and 'Do you follow what I mean?' These references to sight, physical contact and the ability to act according to what other people do or say can be used metaphorically to describe our comprehension of complex entities such as a scientific hypothesis or economic model. It is difficult to imagine a way of speaking that can steer clear of such metaphors.

[26]For an update of research works that utilise the notion of metaphor, see J. Geary (2011). *I Is an Other: The Secret Life of Metaphor and How It Shapes the Way We See the World*. New York: HarperCollins. For a philosophical discussion of Lakoff and Johnson's views on metaphor, see C. Taylor (2016). *The Language Animal: The Full Shape of the Human Linguistic Capacity*. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press, Chapter 5, 'The Figuring Dimension of Language', pp. 129–176.

cause confusion can be readily explained: It is due to their connection with something deep about the human that they surface prominently in the way we speak and talk. If this is the case, it is no longer feasible to maintain that 'forms of representation' are concerned primarily with how we describe or talk about things: A way of acting or behaving is already in place when a 'form of representation' can be articulated in our language. In other words, 'forms of representation' are what they are precisely because they are expressions of something fundamental about humans and how they live. What we can discern here is some conceptual tension that lies within Hacker's account of 'forms of representation': The fact that they are able to generate philosophical confusions seems to suggest that they are not *mere* linguistic habits developed by human beings. Our tendency to *do* things in certain ways makes it possible for us to talk about things in some specific manner.[27] The case study follow will continue with this line of investigation.

V | A CASE STUDY: 'I AM MY BRAIN' AS A 'FORM OF REPRESENTATION'

The question whether 'forms of representation' should be assimilated to metaphors deserves more discussion than can be found here. I have been trying to show that both metaphors and 'forms of representation' can be used as analytic tools: By focusing on how we conceptualise something (using a metaphor) or how we represent a concept using another, it is possible to better understand the conceptual frameworks with their implicit assumptions and predispositions within specific languages. Despite this functional resemblance between metaphor (as discussed by Lakoff and Johnson) and forms of representation (as used by Hacker), their employment in conceptual enquiry can lead to radically different conclusions. By turning to the increasingly common tendency to use the brain to refer to the human, we are going to discuss whether a 'form of representation' can be helpfully applied, with the aim of further elucidating its meaning. According to Lakoff and Johnson's account, the mind is no doubt an abstract concept. To make sense of it, one could (though not necessarily) use the metaphor of an object to understand the mind. This can no doubt be an aid for some people when they are trying to grasp what the mind is: They can therefore say something like, 'A human being thinks with his or her mind', 'The mind is the thinking organ', and so on. But to Hacker, this is precisely where philosophical confusions arise: Instead of seeing the mind as a thing, he urges us to see it as an array of *powers* exhibited by the human being (not the mind or the brain). These include cogitation, deductive reasoning, deliberation, and so on.

[27]Consider the expression 'It is raining': The apparent lack of a reference for the subject does not seem to have created substantial and long-lasting confusion.

In recent years, we can observe an increasingly common willingness among humans to identify with their brains. Neuroscience and popular science fiction have no doubt contributed to this; and we can feel its impact on the layperson and specialist (i.e., scientist) alike. The expression 'I am my brain' can therefore encapsulate this mentality. Using the approach developed by Lakoff and Johnson, this way of speaking can be taken as a metaphor or metonym: a part, or an important part of a human being, is being used to stand for the human being as a whole. Needless to say, this way of depicting the human can suggest something important to us—that we place great emphasis on cogitative and intellectual abilities when it comes to our understanding of humans—but it also hides the important fact that a human cannot be reduced to one bodily organ, however important it is to the living creature. Hacker can accept using the brain as a metaphor for the human being, so long as it is recognised that this is nothing but a metaphor.[28] And Hacker is right to think that what begins as a metaphorical way of referring to the human being does *not* always end as a metaphor: Research projects and experiments in the social and natural sciences often make the assumption that it is the brain, rather than the human organism, that passes judgements, makes calculations, comes to a decision, and so on. According to this perspective, a human being can lose any bodily part or organ and remain the same entity, provided that his or her brain is kept intact. In Hacker's words, this has the effect of giving the brain the status of 'the limiting case of a mutilated human being'.[29]

The identification of the human being with his or her brain is a very significant issue, not only because it pertains to the nature of the mind and the self-conception of human beings, but also because it can have far-reaching ethical and political implications. If the brain becomes the dominant metaphor for the human being, will neuroscientists become *the* authority on human affairs? Does it follow that the task of understanding the human should be left to scientists equipped with the most sophisticated technology? Would this eventually erode our sense of human agency and responsibility?[30]

A more immediate and relevant question for our present discussion is this: Given the increasingly common tendency to see the human being as his or her brain, has the brain become *a form of representation* for the human being? Note that this possibility does not rule out other forms of representation: As noted above, Hacker argues that the soul (understood *not* as an immaterial substance) can be a fruitful form of representation for the human being.[31] As I have hinted above, although using the brain as a form of representation is a relatively new one, its impact is no less important than our propensity

[28] This is documented in the 2014 podcast, 'The Ethics of the Cognitive Sciences: what can the brain tell us about the mind?' (https://www.lse.ac.uk/lse-player?id=2190 – accessed 14 February 2022).

[29] *Human Nature: The Categorical Framework*, pp. 305–6.

[30] For a philosophical discussion of issues about the mind-brain, see A. Noë (2009). *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness*. New York: Hill and Wang. See also D. Cockburn (2001). *An Introduction to the Philosophy of Mind*. Basingstoke and New York: Palgrave.

[31] *Moral Powers*, Chapter 5, 'Evil and the Death of the Soul'.

to see knowledge as possession, or thinking as an act. While this move has been aptly criticised by Hacker, he never uses the term 'form of representation' (in his *Human Nature* tetralogy) to describe this act of using the brain to portray the human being.

Perhaps this curious scenario can help us to clarify where Hacker stands in connection with the notion of 'forms of representation'. A few observations can be made:

i. Conceptual incoherence or nonsense does not preclude a way of speaking or describing from being termed a 'form of representation'. For Hacker, seeing the mind as a thing can lead to all sorts of nonsense, but he still maintains that there exists a reified or objectified form of representation for the human mind. From this, we can see that a 'form of representation' can be used in a neutral way, and not necessarily with any pejorative connotation.
ii. It is true that the readiness to see the brain as the human being is something new, and it is most likely a product of a culture that gives science and technology great credence. This is by no means universal. From a purely linguistic point of view, one could argue that the brain, as an organ of the living being, does not *mean* (or refer to) the human being. However, this lexical meaning of 'brain' is not the sole determinant of meaning, at least according to Hacker. To grasp the grammar of an expression, he repeatedly reminds us that it is necessary to come to a surveyable overview regarding its usage in different contexts. Given the prevalent *use* of the brain as a means of referring to 'the limiting case of a mutilated human being' by the general public and some members of the scientific community, this way of talking about the brain seems to have entered our conceptual landscape. No matter how problematic this may sound, it is gaining acceptance as a way of describing the human being. As a result of this, we can say that it is already part of the 'grammar' of what it is to be a human being.
iii. If Lakoff and Johnson are right to think that our way of thinking about ourselves and the world are fundamentally metaphorical, it is only to be expected that one can come to the realisation that various 'forms of representation' are actually at work in different domains. If the notion of a 'form of representation' is of any use to us, it should help us to uncover the presuppositions in our language: When confronted with an abstract or complex concept, it is far easier for us to simplify it by focusing on one or a few of its salient features, and the existing way we speak of it can offer us ready-made shortcuts to such features. Thus, an act of representation is already done for us via our language, when we take for granted our customary or pre-reflective ways of conceptualisation. Taking this into account, there seems to be room for 'forms of representation' to be further applied to different cases and phenomena.

The above considerations indicate that there is no strict reason against using the expression 'form of representation' to characterise 'I am my brain'. To Hacker, the use of one bodily organ to stand for the whole human being seems to be an instance

of the mereological fallacy: It lies in the mistake of thinking that what is imputable to the part can be applied to the whole. For those who readily identify with their brains can, of course, claim that they do not literally think that they *are* their brains. Once they have conceded this, we are left with the question as to exactly what they mean: Are they just talking in a metaphorical way, or is a 'form of representation' present in the way they speak? It seems unclear as to why Hacker does not employ 'forms of representation' in the discussion of this case. Given the variety of entities (such as the mind, thought, emotion, and the human being) that are discussed alongside different 'forms of representation', the extension to 'I am my brain' does not seem unwarranted. One explanation can perhaps account for Hacker's unwillingness to use the term in the brain case—this concerns his tendency to see 'forms of representation' as primarily a *linguistic* habit about how we speak. This may sit uncomfortably with the brain case because its prevalence seems to stem not just from language, but from a cultural climate under the hegemony of science and technology. If this is the case, then it only shows that political and ideological concerns cannot be easily demarcated from talks about 'forms of representation'; and Hacker's treatment of it is no exception.

VI | CONCLUDING REMARKS

If the above exploration of 'forms of representation' is plausible, we can begin to see that they can be a useful analytic tool for the study of the relationship between our language and how we conceptualise certain things. In this way, 'forms of representation' resemble metaphors, because they are means that can expose the fact that the working of our language is ridden with presuppositions. The exact relationship between 'forms of representation' and metaphors remains to be seen, and so is the logical character that makes them distinct from one another. As a relatively uncommon and underutilised term, the grammar regarding the use of 'forms of representation' is still taking shape and evolving. While our bodily features and animal nature can account for some of the metaphors prevalent in human languages, it is an open question whether the same can be said of different 'forms of representation'. For 'forms of representation' to become fully serviceable in philosophical discussion, it would be helpful to know on exactly on what grounds can a form of representation be challenged or criticised.[32] This will perhaps lead to an exploration of the ethical and political dimensions of different 'forms of representation'—this is definitely part of an unfinished project.[33]

[32]The critique of the use of perfect competition as the ideal model of the market can be seen as a dispute about a form of representation. See R. Hill and T. Myatt (2010). *The Economics Anti-Textbook: A Critical Thinker's Guide to Microeconomics*. London: Zed Books.

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REFERENCES

Cockburn, D. (2001). An Introduction to the Philosophy of Mind. Basingstoke and New York: Palgrave.
Geary, J. (2011). I Is an Other: The Secret Life of Metaphor and How It Shapes the Way We See the World. New York: HarperCollins.
Hacker, P. M. S. (2007). Human Nature: The Categorical Framework. Oxford: Blackwell.
Hacker, P. M. S. (2013). The Intellectual Powers: A Study of Human Nature. Oxford: Wiley-Blackwell.
Hacker, P. M. S. (2018). The Passions: A Study of Human Nature. Oxford: Wiley-Blackwell.
Hacker, P. M. S. (2019). Intellectual Entertainments: Eight Dialogues on Mind, Consciousness and Thought. London: Anthem Press.
Hacker, P. M. S. (2021). The Moral Powers: A Study of Human Nature. Oxford: Wiley-Blackwell.
Hill, R. and Myatt, T. (2010). The Economics Anti-Textbook: A Critical Thinker's Guide to Microeconomics. London: Zed Books.
Kuusela, O. (2005). "From Metaphysics and Philosophical Theses to Grammar: Wittgenstein's Turn." Philosophical Investigations. Vol. 28, pp. 95–133.
Lakoff, G. and Johnson, M. (1980). Metaphors We Live By. Chicago and London: The University of Chicago Press.
Marx, K. (1844). "Economic and Philosophical Manuscripts." In D. McLellan (ed.) (2000). Karl Marx: Selected Writings. New York: Oxford University Press, pp. 83–121.
McGinn, M. (1997). Routledge Philosophy Guidebook to Wittgenstein and The Philosophical Investigations. London and New York: Routledge.
Noë, A. (2009). Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness. New York: Hill and Wang.
Peterson, D. (1996). "Introduction." In D. Peterson (ed.), Forms of Representation: An Interdisciplinary Theme for Cognitive Science. Exeter: Intellect Books, pp. 7–27.
Pitkin, H. F. (1967). The Concept of Representation. Berkeley, Los Angeles and London: University of California Press.
Ridley, A. (2004). The Philosophy of Music: Theme and Variations. Edinburgh: Edinburgh University Press.
Taylor, C. (2016). The Language Animal: The Full Shape of the Human Linguistic Capacity. Cambridge, Massachusetts, and London, England: The Belknap Press of Harvard University Press.
Wittgenstein, L. (2009 [1953]). Philosophical Investigations. Revised 4th edition by P. M. S. Hacker and J. Schulte. Oxford: Wiley-Blackwell.

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