

MEMORY, RECOLLECTION AND CONSCIOUSNESS IN SPINOZA'S *ETHICS*

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Abstract. Spinoza's account of memory has not received enough attention, even though it is relevant for his theory of consciousness. Recent literature has studied the "pancreas problem." This paper argues that there is an analogous problem for memories: if memories are in the mind, why is the mind not conscious of them? I argue that Spinoza's account of memory can be better reconstructed in the context of Descartes's account to show that Spinoza responded to these views. Descartes accounted for the preservation of memories by holding that they are brain states without corresponding mental states, and that the mind is able to interpret perception either as new experience or as memory. Spinoza has none of these conceptual resources because of his substance monism. Spinoza accounts for memories as the mind's ability to generate ideas according to the order of images. This ability consists in the connection of ideas, which is not an actual property, but only a dispositional one and thus not conscious. It is, however, grounded in the actual property of parts of the body, of which ideas are conscious.

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Spinoza's account of memory as a mental capacity is rarely discussed, which is surprising given the central role memory plays in Spinoza's philosophical project.¹ This is even more surprising given that the way Spinoza accounts for memories has serious ramifications for his account of consciousness, which has recently received a lot of attention.² In the discussion of the "pancreas problem," scholars have struggled to provide a reconstruction of Spinoza's account of consciousness. On the one hand, Spinoza concludes on the basis of his monism that everything that happens in the body is represented in the mind in the form of an idea.³ On the other hand, he says that everything that is an idea is "animated."⁴ Moreover, he does not provide an account of selective consciousness – i.e., he does not distinguish conscious and non-conscious ideas. The problem discussed in the pancreas debate is therefore: How can the apparent fact that states or events in the body – for instance, the working of the pancreas – are not always consciously experienced be reconciled with Spinoza's philosophy of mind?⁵ However, the question can also be turned around: Can states or events in the mind be such that they are not always consciously experienced? An

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obvious example is memories, which seem to be in the mind, yet memories that are not currently being entertained are not experienced consciously. How Spinoza answers this question is the topic of this paper.

In the history of philosophy many theories of memory have been formulated, which, following Michaelian and Sutton, can be grouped roughly into two large camps, namely, the preservationist and generationist views.⁶ According to a standard preservationist view, the mind has access to some kind of “storehouse” where memories are retained and from which they can be retrieved when necessary. On this view, memories not currently being entertained are actual states or events that represent a past occurrence, even when the occurrence is not actively remembered. In contrast, the standard generationist view holds that acquiring memories is similar to a learning process through which the mind acquires the ability to form actual states or events that represent a past occurrence. On this view, memories are potential or dispositional states that do not themselves represent the past occurrence but are able to generate a representation of it when the need arises. While there are more refined versions of these views and many middle positions, it seems that Spinoza’s position is not compatible with either of these camps. He cannot join the preservationist camp because of his adherence to the doctrine of transparency of the mind, and he cannot endorse a generationist view because of his rejection of never-actualized dispositions.

As I will show in section 1, Spinoza makes repeated claims about memories, which shows that he felt the need to provide an account of memory. This is significant because in the case of the pancreas problem it is a legitimate worry that Spinoza might not have been interested in the conscious nature of our ideas of the working of the pancreas. However, the fact that he discussed memory raises the question: What type of account of memory did Spinoza actually provide, and how compatible is it with other claims in his philosophy of mind? As I will argue in section 2, his account cannot be a straightforward generationist or preservationist account because of the above-mentioned difficulties. In section 3, I present Descartes’s account of corporeal and intellectual memory. I argue in section 4 that by comparing Spinoza’s account of memory with Descartes’s account of corporeal and intellectual memory, a more nuanced view can be found. In section 5, I argue for my revised generationist interpretation. This account accomplishes three things: it accounts separately for phenomena that Descartes discussed under the labels “corporeal memory” and “intellectual memory,” it clarifies the status of non-entertained memories in conscious experience, and it upholds Spinoza’s strict metaphysical monism.

But before that, some terminological clarification is needed. First, I will use “state,” “property,” and “event” interchangeably for what Spinoza calls “mode.” There is no way to distinguish these in Spinoza’s metaphysics. However, it would be odd to say that there is an event of “breaking ten years from now” in the event “glass,” just as it would be odd to say that the subject has the property of “his pancreas working.” In both cases Spinoza would say that one mode inheres in another.⁷ Second, I will use “disposition,” “never-actualized disposition,” “non-actualized disposition,” and “actual property” in the following way: I call “actual property” a non-dispositional property of an object – for example, the property of

being made of porcelain. I call “disposition” a property by virtue of which it is possible for an object to acquire an actual property; for example, by virtue of the disposition “fragile” it is possible for an object to have the actual property of breaking. Finally, I call “never-actualized disposition” a disposition that is never actualized, such as, for example, the fragility of a glass that never breaks. By contrast, a “non-actualized disposition” is a disposition currently not actualized, such as the fragility of a glass today that is going to break tomorrow.

1. Spinoza's account of memory in the *Ethics*

The most important passage in the *Ethics*⁸ where Spinoza discusses memory and recollection is E2p18. The fact that the scholium to this proposition is cited in E5p21 as the definition of memory shows that Spinoza also considered this passage to be the place where he gives his account of the working of memory. I quote the passage in full:

If the human body has once been affected by two or more bodies at the same time, then when the mind subsequently imagines one of them, it will immediately recollect the others also.

Dem.: The mind (by P17C) imagines a body because the human body is affected and disposed by an external body's impressions (*vestigis*) as it was affected when certain of its parts were struck by the external body itself.⁹ But (by hypothesis) the body was then so disposed that the mind imagined two [or more] bodies at once; therefore it will now also imagine two [or more] at once, and when the mind imagines one, it will immediately recollect the other also, q.e.d.

Schol.: From this we clearly understand what memory is. For it is nothing other than a certain connection of ideas involving the nature of things which are outside the human body – a connection which is in the mind according to the order and connection of the affections of the human body [...].

Here memory is defined as a special case of imagination. Imagination, as Spinoza has defined it in E2p17, is a special way in which the mind forms ideas when an external body causes the human body to change its state. For example, the rays of light refracted on the surface of an apple cause the back of the eye to have a corporeal representation of the apple; this change of state is the bodily image of the apple, which is perceived by the mind in the form of an imaginative idea of the apple. The other way of forming ideas is intellection, in which case the mind forms an idea from its own conceptual resources without depending on external causes.¹⁰ The statement that memory is a form of imagination therefore amounts to the claim that memories are ideas in the mind brought about by external causes. Of course, this leaves open the question of what distinguishes memories from other types of imagination: for example, what is the difference between the memory of an apple and the perception of that apple?

In order to clarify his account, Spinoza presents in the scholium two examples of the working of memory. The first is the use of language: when the human mind thinks the idea of a word (e.g., the Latin word *pomum*) the mind almost automatically thinks also the idea of the meaning of the word (e.g., the image of an apple). The second example concerns the different associations to which the same visual experience can give rise: when seeing traces of a horse, different people with different personal histories might think of either a warhorse or a draft horse. Both examples are intended to highlight the arbitrary nature of memories (as opposed to the rational connection between intellectual ideas): the connection established in memory between a word and its meaning is conventional,¹¹ whereas the connection between a trace and a thought image depends on the form of life of the given subject.¹² That is, just because one idea reminds the subject of another idea does not mean that there is a logical connection between these ideas. (I will offer a more detailed analysis of these examples in section 4 below.)

Spinoza uses memory as an *explanans* in his theory of affects. He establishes that affects can be remembered together (E3p14, E3p52), citing E2p18. Furthermore, the memory of one thing can reduce the appetite for something else (E3p2s); the memory of a hated but destroyed object still causes sadness (E3p47s); the mind strives to recollect things that destroy a hated or fearsome thing (E3p13); longing is a desire encouraged by the memory of some objects and restrained by the memory of others (E3p36, E3defaff32). Finally, the memory of a recent event has a more powerful grip on our mind than the memory of a distant event (E4p10).

Spinoza also uses recollection as an *explanans* when he gives his account of the formation of universal notions (E2p40s1). On his view, we form the universal notion of human being because we have encountered many people and formed an image – i.e., a memory – of each of them. However, we soon reach the limits of our capacity to remember each of them distinctly, so we start blurring these images together. In these blurred – i.e., confused and obscure – images, the characteristics shared by many particular images are more visible, while those shared by fewer images are less easily recognized. Since these universal notions are blurred ideas of no single image in particular,¹³ memory features in the definition of the first kind of knowledge as one possible source of error (E2p40s2).

Similarly, recollection is mentioned in the explanation of the generation of modal terms (E2p44s, E3p2s). Here Spinoza claims that always having certain ideas together gives rise to the idea of necessity, while having ideas sometimes together and sometimes independently gives rise to the idea of contingency. The latter modal term plays a role in his theory of affects as well (E4p13). These epistemically suspect roles of memory notwithstanding, memory can play a constructive role as well: in E5p10s Spinoza advises us to memorize specific maxims which we can use when scientific knowledge is in practice unattainable.

2. Why is Spinoza's account of memory problematic?

As I will argue in this section, among Spinoza's statements about memory, some seem to support a preservationist reading, others a generationist one. A straightforward preservationist reading, however, is ruled out by his notion of

consciousness: for if everything that happens in the body is conscious, it is not clear how memory traces could be in the brain without the mind being aware of them. The generationist approach does not have this problem, but it is ruled out by Spinoza's metaphysical commitments: for if everything possible has to be actual at some time, it is not clear how Spinoza can allow dispositions for forming certain memory pictures.

What seems to speak in favor of a preservationist reading is the way Spinoza explains what memory is and how it is relevant for other aspects of his philosophy. The role of images (E2p40s1, E5p23), as well as of "impressions *or* traces" (E3post2; cf. E2p18d) seems to point in the preservationist direction. It seems that there is an actual (i.e., non-dispositional) bodily state in the form of an image or memory trace in the brain that represents the past occurrence, even if it is not remembered.

At the same time, the emphasis on the association and formation of ideas seems to point to the generationist reading. In many passages (E2p18, E2p44s E3p2s, E3p14, E3p52) Spinoza treats memory as the mind's ability to form certain ideas when appropriate external stimuli are present. Memory seems to be a special case of the association of ideas, when certain ideas acquire a habit of being formed together, and this habit is not grounded in the representational content of the ideas.¹⁴ For example, if the mind is able to form the idea of "Peter every day at noon" because Peter has often been seen at noon, then the mind has a memory of Peter at noon. Thus, it seems that memory is not a preserved representation, but rather the way in which the mind responds to certain external stimuli.

However, both of these options face considerable difficulties. A generationist reading would have to explain how this ability to generate ideas could fit into Spinoza's metaphysical picture. Spinoza is committed to the view that everything actual is necessary in some sense (E1p33s1, E2p44). On the basis of this, some authors have inferred that Spinoza is a necessitarian, i.e., that he holds that the actual world is the only possible world.¹⁵ But it might instead be the case that he uses a different, statistical modal concept that can accommodate the claim that there are possible worlds that are necessarily non-actualized; such a position would allow for true counterfactual statements.¹⁶ Whatever Spinoza's favorite modal logic might be,¹⁷ it seems to be undisputed that Spinoza does not allow for never-actualized possibilities; rather, everything that is possible has to be actual at some point in the history of the universe (E1p17c2s).¹⁸

One intuitive way to understand non-actualized dispositions is in terms of possibilities. For example, the fragility of a porcelain cup – i.e., the cup's capacity to break – is grounded in the possibility of it breaking. That is, when we say that a cup is fragile, we attribute to an actual cup the possibility of acquiring the actual property of breaking. It is a matter of debate whether this possibility is understood metaphysically in terms of possible worlds, or in terms of formal essences in the infinite intellect, or in terms of epistemically unreliable imaginations,¹⁹ but none of these options can make sense of a disposition without referring to a possibility.²⁰ However, if there are no possibilities that are never actualized, then only cups that actually break have the capacity to break – i.e., there are no never-actualized dispositions, only non-actualized dispositions. This would have odd consequences: for example, if two people had identical memory traces in their brains, but only one of them actually recalled the

memory during her lifetime, Spinoza would have to say that the other did not have the memory, even though her brain state was identical.

But even if Spinoza were ready to bite the bullet and embrace this counterintuitive consequence, there is a further problem with this interpretation. The capacity of the cup to break depends on two actual properties: on the one hand its actually breaking, and on the other the actual way in which its material is constituted. It is not enough for the cup to have the property that it is going to break ten years from now for it to have the capacity to break now. This property of “breaking ten years from now” has to be grounded in the current property of having a specific material constitution, such as being made of porcelain: the property of being made of porcelain is a necessary but not sufficient condition for a cup to have the capacity to break, since on this construal a cup that never breaks does not have the capacity to break.²¹ This means, however, that there must be a similar actual property in the case of the human body – presumably the traces or impressions mentioned in E2p18d – that grounds the ability to remember in the same way that the property of being made of porcelain grounds the fragility of the cup. That is, just as the disposition “fragile” is reducible to the property “being made of porcelain” together with the event “breaking ten years from now,” the disposition “being able to remember” seems to be reducible to the property “having memory traces in the brain” together with the event “recalling the memory ten years from now.”

To sum up, a generationist view seems to work better as an account of memory that is compatible with Spinoza’s account of consciousness. For since it does not involve actual representations in the body, problems of the consciousness of the ideas of these traces seem not to arise. However, without postulating actual properties in the body, no generationist account can be provided if Spinoza’s metaphysics is interpreted in such a way that it does not allow for dispositions that are irreducible to actual properties.

This leads us to the preservationist account. As we have seen, the generationist account implies acquiring an actual property (“having memory traces in the brain”) no less than the preservationist account does. Because of this assumed actual property in the body, both the preservationist and the generationist readings face the difficulty that it is not clear whether the body can acquire actual properties without the mind constantly being aware of them. Spinoza states in E2p12 that “nothing can happen in [the human] body which is not perceived by the mind.” Yet whether one is speaking of actual representations (on the preservationist reading) or of the actual grounds of the ability to remember (on the generationist reading), both will be properties of the body. Acquiring either property is a change in the body, which the mind is then supposed to be perceiving. Non-entertained memories, however, by definition do not feature in the stream of consciousness of the subject. That is, the generationist reconstruction does not fare better in this respect: the fact that the ability is non-actualized does not help in accounting for non-entertained memories, if the ability is grounded in an additional property that now has to be accounted for. The problem whether the body can have actual properties without perceiving them is the famous problem that became known as the “pancreas

problem” in the literature, where it is asked whether the working of the pancreas is supposed to be conscious, given Spinoza’s claim in E2p12.

One way to address the problem is to say that the problem simply does not exist.²² The most sophisticated version of this answer is provided by Ursula Renz, who argues that the argumentative order of the *Ethics* should not be ignored. In the *Ethics*, Spinoza first defines the mind as the idea of something (E2p11) and then states that the object of that idea is the human body (E2p13). This means that when Spinoza formulates the above-mentioned claim in E2p12, it has not yet been stated that the object of the idea that constitutes the human mind is the human body. From this Renz infers that Spinoza does not use the term “human body” in its everyday sense, but in a technical sense: what the human body is, is defined by the human mind. It is not the case that the human body is a given, and whatever is in its idea is the human mind; rather, it is the human mind that is a given, and whatever is its intentional object is the human body. Renz’s example is a surgeon whose tools can become part of the intentional object of her mind and thus part of her body. Her claim is that normally the pancreas is not part of the intentional object of the human mind, and therefore it is not in the human body in Spinoza’s technical sense. Thus, E2p12 does not concern the pancreas, and the pancreas problem does not arise.²³

This is a solution that might be successful concerning the pancreas; in the case of memories, however, it does not work. This is because memories are in the mind in the sense that the subject can deliberately recall them (and they do not just spontaneously emerge, as perceptions do). However, the subject is not aware of them, since our memories are clearly not part of our conscious experience all the time. Renz’s interpretation thus faces a dilemma: either memories – or the actual properties that ground the ability to generate memories – are not in the mind, in which case they are not really memories (or abilities) of the subject; or, if they are in the mind, they are conscious all the time, which clearly is contrary to our everyday experience.

One way in which Renz could defend her account is by maintaining that memories are not really in the mind. She could claim that they are outside the mind, but stand in an appropriate relation to the mind, and therefore can cause representations of past occasions in the mind when the need arises.²⁴ However, this solution raises the problem that if this representation is caused by something outside the mind, the mind has to have the ability to identify this representation as a memory, as opposed to a perception. Since memory is a kind of imagination and therefore falls into the same category as perceptions, the mind has to have an additional idea by which it can distinguish memories from perceptions. However, either this idea is in the mind, in which case the same problem can be raised; or it too is outside the mind, in which case there will be an infinite regress. As we will see in the next section, the same problem was raised by Descartes, and for him the regress is blocked by intellectual memory.

To sum up, we have surveyed three possible interpretations of Spinoza’s account of memory, none of which works as it stands. (1) The first option is that non-entertained memories can be actual properties in the body that represent past occurrences. In this case the question arises: Why is the subject not aware of these properties all the time? Alternatively, non-entertained memories could also be abilities

to form representations when recalled. In this case, however, the ability has to be grounded in either (2) an actual property of the body, or (3) a cause external to the body. In the case of the second option (2), the same question arises: Why is the subject not aware of this property all the time? In the case of the third option (3), the problem is that there must be a criterion for distinguishing perceptions from memories. This criterion is either internal to the subject, in which case it has to be grounded in an actual property of the body, and the same problem about awareness of this property arises; or it is external to the subject, in which case there will be an infinite regress.

3. Descartes's account of corporeal and intellectual memory

I propose to approach Spinoza's theory of memory from Descartes's account, which I claim can help us to solve the above-mentioned difficulties, since it is well known that Spinoza's main source and influence was Descartes's philosophy,²⁵ and his philosophy was conceived as a secularized development of the Cartesian philosophical project.²⁶

Descartes distinguishes between what he calls corporeal memory and intellectual memory. His theory of corporeal memory remained fairly consistent throughout his career and is much easier to make sense of than his account of intellectual memory.²⁷ In his *Treatise on Man*²⁸ Descartes explains corporeal memory as follows: when we have some perception, the pores or gaps at the end of the neural fibers in the brain are enlarged by the animal spirits, and in this way the brain tissue becomes disposed to produce the same movement of animal spirits even in the absence of external stimulus.²⁹ Thus, a memory is a pattern in the brain tissue where the neural fibers end. When the animal spirits flow through the brain tissue that is thus patterned the human mind remembers the idea it had when the pattern was formed. Similarly, in the *Discourse on the Method* memory is a corporeal function – that is, it is a part of the corporeal imagination which the mind can use to recollect past images.³⁰ In his letters, Descartes states that the number of folds in the brain tissue limits the number of memories the brain can retain.³¹ Moreover, we remember those things that we encounter often, not those things that we did when we were very young.³² Our experiences as infants, as well as some of our dreams, are relatively unique, which explains why we do not remember what we were thinking during dreamless sleep³³ or infancy.³⁴

In *The Passions of the Soul*, Descartes recounts that when recollecting something, the human mind directs the pineal gland so that animal spirits flow in every direction in search of the specific trace in the brain; when the trace is found the idea is recollected.³⁵ Since memory is corporeal, it can serve to explain unconscious drives and preferences. For example, the image of cat might have been linked with the passion of fear in childhood, and this link can persist in the brain tissue, causing fear whenever the subject sees a cat. In this case, the cause of fear is not conscious to the subject, who might even conclude that the cat is a fearsome animal.³⁶

In his letters, Descartes is happy to embrace the idea that memory is a corporeal modification of the neural fibers, not only in the brain but also in other parts of the body; for example, a flute player's memory of flute playing is in his hand.³⁷

In the *Principles of Philosophy*, memory is a possible source of error: since we retain images in memory even after the actual state of affairs has changed, we might assent to ideas that were previously veridical but are no longer.³⁸

From these remarks we can infer that Descartes discusses a number of phenomena in terms of corporeal memory. Most importantly, he uses corporeal memory to account for both the retention of past experiences (i.e., the generation of token ideas) and habituation (i.e., the generation of a type of idea when another type of idea is present). In the case of retention, his account seems to combine preservationist and generationist elements: the folds in the brain retain an actual corporeal image (note the metaphor of the pineal gland “searching” for the memory, as if in a storeroom, by directing the flow of animal spirits) which might or might not on its own represent the past occurrence.³⁹ This brain state, however, generates a mental state only when the appropriate situation arises. The appropriate situation involves the animal spirits flowing through the corporeal image, but having a mental state cannot consist simply in this, since we do not experience flashing images of past occurrences before successfully recalling the right memory, as the above-mentioned metaphor of a “cerebral search engine” would suggest.⁴⁰ In the case of habituation, his account seems to be a straightforwardly generationist one: the particular nerves acquire a disposition to be opened together, which constitutes an ability of the mind to form particular representations when certain ideas are entertained. As we will see shortly, this purely generationist account has the problem that it has to account for the mind’s ability to identify particular recollections as instances of memory, as opposed to instances of new experience.

In addition to corporeal memory, Descartes accepts intellectual memory, but his account of it is far less developed and far less easy to make sense of.⁴¹ A first difficulty concerns the term itself, which can mean either of two things: memory that belongs to the intellect, or memory of which the objects are intellectual. The first option could itself amount to two different claims: (1) that intellectual memory is a memory belonging to the thinking thing, and thus peculiar to humans; or (2) that intellectual memory belongs to the thinking thing insofar as it is independent of the body. (Note that the second claim entails the first one, but not the other way around.⁴²) Both claims are supported by explicit claims made by Descartes: (1) that intellectual memory belongs only to humans (who are special because they are both thinking and extended things),⁴³ and (2) that it is independent of the folds in the brain.⁴⁴ The second option would amount to a third claim (3) that intellectual memory is about objects that can be known without using the body – for example, the intelligible triangle as opposed to the imagined shape of a triangle,⁴⁵ universals,⁴⁶ and logical axioms.⁴⁷

If we take a look at the problems where Descartes treats intellectual memory as an *explanans*, the picture becomes even more complicated. One problem that clearly requires intellectual memory is the resurrection of the dead.⁴⁸ Descartes claims that with the help of intellectual memory the resurrected will be able to remember past occurrences, and it is implied that they will be able to identify their loved ones. However, since he does not elaborate on whether the resurrected will be purely spiritual beings or will have glorified bodies (the brains of which could host memory

traces),⁴⁹ and since he does not explain how intellectual memory of particular bodies is possible, one can only second Clarke's conclusion that Descartes is adopting a traditional religious view without sufficient philosophical underpinnings.⁵⁰

More interestingly, Descartes states that intellectual memory links the sound or shape of a word to its cognitive meaning.⁵¹ Note that in the Second Set of Replies, Descartes uses the same example in order to illustrate what it means to have an idea.⁵² He also argues in a letter to Arnauld that intellectual memory is necessary in order to identify the occurrence of a perception as either a new perception or the recollection of a past experience:

From this it is clear that it is not sufficient for memory that there should be traces left in the brain by preceding thoughts. The traces have to be of such a kind that the mind recognizes that they have not always been present in us, but were at some time newly impressed. Now for the mind to recognize this, I think that when these traces were first made it must have made use of pure intellect to notice that the thing which was then presented to it was new and had not been presented before; for there cannot be any corporeal trace of this novelty.⁵³

Descartes's claim here is that corporeal traces are not enough for remembering: the corporeal movement is the same in both perception and recollection, since there "cannot be any corporeal trace of" novelty or recurrence. Therefore, an intellectual memory is needed that can identify thoughts as instances of either perception or remembering.⁵⁴

One possible way of interpreting intellectual memory is to identify it with the mind's ability to access innate ideas.⁵⁵ This reading is supported by Descartes's claim that the thoughts of infants are about corporeal sensations, and therefore infants cannot contemplate God or metaphysical issues.⁵⁶ What the infant lacks is reflexive consciousness, identified in the above-cited letter to Arnauld with intellectual memory.⁵⁷ That is, if the infant's thoughts are different from an adult's because she lacks intellectual memory, and as a consequence she cannot contemplate God – which is the contemplation of an innate idea – then intellectual memory is the recollection of innate ideas. In the *Principles of Philosophy*, however, Descartes identifies the difference between infant thoughts and grown-up thoughts as the difference between judging the thought to be about something outside the subject or not.⁵⁸

From these claims we can conclude (without aiming to provide a comprehensive interpretation of Descartes's theory of intellectual memory) that intellectual memory is a capacity of the mind that (a) is independent of the state of the body, (b) identifies thoughts as new or past occurrences, and (c) is able to give thoughts meaning beyond what is represented in the corporeal movement. For example, the feeling of bodily pain acquires additional meaning when it is understood to be caused by a particular external object.

4. Comparison of Descartes's and Spinoza's theories of memory

Although Descartes distinguished between corporeal and intellectual memory, the ways in which Spinoza built upon his account is evident. Both Descartes and Spinoza claim that memory traces remain after an experience and that these traces dispose the body to being affected in a certain way. Both consider this ability to acquire memory traces to be a source of error, because the traces remain the same while states of affairs change, and because their scope is limited by the flexibility of the brain's matter. Both also claim that memories are ways in which particular bodily movements and the corresponding ideas are associated with other bodily movements and their corresponding ideas.

As we have seen, on Descartes's account there are two constraints on the working of these associations. One concerns the body's ability to work independently⁵⁹ of the mind, the other the mind's ability to work independently of the body. First, the movement of animal spirits through the memory traces is a necessary but not sufficient condition for forming a recollected idea in the mind. When the pineal gland "searches" for the right memory, the animal spirits move through the different memory traces without the corresponding memories being recalled. Second, an intellectual memory is required in order to identify the memory as memory: novelty is a purely intellectual property, and so when the mind perceives the movement of animal spirits and an idea is formed, the mind is not able on that basis alone to determine whether it is a new perception or a memory that it experiences.

Unlike Descartes, however, Spinoza is not a dualist,⁶⁰ and therefore cannot admit either of these constraints as they stand. At the same time, in responding to Descartes, he has to account for the two phenomena of corporeal and intellectual memory that Descartes described. Therefore, I propose to approach Spinoza's account of memory with the expectation that we will find an account that has different solutions for the different problems of corporeal and intellectual memories, even if both solutions are formulated in the context of a monist metaphysics rather than a dualist one.

As we have just seen, the fact that Spinoza intends to account for the phenomena described by Descartes as corporeal memory is evident from E2p18d, which repeats the Cartesian physiological theory of corporeal memory in its outlines. That Spinoza intends to account for the phenomena described by Descartes as intellect and intellectual memory is indicated by the fact that the examples mentioned in the scholium of E2p18 both come from Descartes's description of intellectual memory. In order to show their similarities and differences, I quote both of them extensively. The first example in Spinoza is the following:

And from this we clearly understand why the mind, from the thought of one thing, immediately passes to the thought of another, which has no likeness to the first: as, for example, from the thought of the word *pomum* a Roman will immediately pass to the thought of the fruit [viz., an apple], which has no similarity to that articulate sound and nothing in common with it except that the body of the same man

has often been affected by these two [*NS*: at the same time], that is, that the man often heard the word *pomum* while he saw the fruit.⁶¹

As I have mentioned, the same example is used by Descartes according to Burman:

I do not refuse to admit intellectual memory: it does exist. When, for example, on hearing that the word “K-I-N-G” signifies supreme power, I commit this to my memory and then subsequently recall the meaning by means of my memory, it must be the intellectual memory that makes this possible. For there is certainly no relationship between the four letters (K-I-N-G) and their meaning, which would enable me to derive the meaning from the letters. It is the intellectual memory that enables me to recall what the letters stand for.⁶²

The second example is the following:

And in this way each of us will pass from one thought to another, as each one’s association has ordered the images of things in the body. For example; a soldier, having seen traces (*vestigis*) of a horse in the sand, will immediately pass from the thought of a horse to the thought of a horseman, and from that to the thought of war, and so on. But a farmer will pass from the thought of a horse to the thought of a plow, and then to that of a field, and so on. And so each one, according as he has been accustomed to join and connect the images of things in this or that way, will pass from one thought to another.⁶³

The example of traces in the sand comes up in Descartes as well:

Consequently, if ever I wrote that the thoughts of children leave no traces (*vestigia*) in their brain, I meant traces sufficient for memory, that is, traces (*vestigis*) which at the time of their impression are observed by pure intellect to be new. In a similar way we say that there are no human tracks (*vestigia*) in the sand if we cannot find any impressions shaped like a human foot, though perhaps there may be many unevennesses made by human feet, which can therefore in another sense be called human tracks (*vestigia*).⁶⁴

These examples clearly show both that Spinoza recognizes that the phenomena that Descartes uses as examples for his intellectual memory are something that he needs to account for, and that he wants to account for these phenomena without invoking an intellect independent of the body. In the first case, Descartes argues that intellectual memory is required in order to establish the connection between the sound of the word and its meaning because in the experience of hearing the word “king” there is nothing that would indicate that it means “ruler.” By contrast, Spinoza argues that there is no difference between, on the one hand, the

association between the perception of the word and the idea of its meaning, and, on the other, the association between the perception of a cat and the passion of fear, which Descartes accounts for in purely physiological terms.⁶⁵

In the second case, Descartes argues that intellectual memory is similarly required in order to interpret corporeal traces, both in the brain and in the sand. In the case of traces in the sand, the same shape can be interpreted either as traces of humans or as unevenness on the ground, and it is the intellectual memory that decides which one is perceived. Similarly, in the case of the brain the same bodily motion can be interpreted either as a new sensation or as the recollection of past experience, and it is intellectual memory that determines which one is being experienced. By contrast, Spinoza argues that this interpretative work depends on the past experiences of the subject. The traces in the sand in themselves are ambiguous, and different minds can interpret them as traces of a warhorse or of a draft horse, but in the context of the other ideas of a given mind it is impossible to experience them other than as they are experienced: the soldier cannot but see them as traces of a warhorse, even though there is nothing in the traces themselves that would indicate that they in fact belong to a warhorse. The past experience recorded in the bodies of the soldier and the farmer sets the tone for their new experiences, as it were.

The implication is that traces in the brain are similarly ambiguous. Although there is nothing in the idea of a corporeal movement in itself that could indicate that it is a new perception or that it is a memory of a past occurrence, in the context of the other bodily images (and in the context of the corresponding ideas) it is necessarily interpreted in the way it is. If the image has connections to other images, the mind cannot but interpret it as a memory, whereas if it has no connection with other images, it is interpreted as a new perception. This is confirmed in Spinoza's characterization of wonder and the role of E2p18 in this characterization. In the definition of affects he states that wonder is the imagination of a corporeal image that has no connection with other images, and therefore the mind remains fixed in imagining it (E3defaff4). In the explication of the definition, Spinoza cites E2p18, where he says that he has shown how ideas become associated. When an idea is formed for the first time it clearly lacks such an association with other ideas, and therefore it is not experienced as memory but as a new perception. Here, Spinoza echoes Descartes's sentiment that "there cannot be any corporeal trace of [the] novelty [of an image]."⁶⁶ From this, however, Spinoza does not conclude that the novelty is in the judgment of intellectual memory; he concludes instead that the novelty is in the connection of corporeal images, or rather in the lack thereof.⁶⁷

5. Spinoza's theory of memory reconsidered

My argument is that the above-mentioned conclusion of Spinoza reveals his solution to the problem presented by his monist reinterpretation of Descartes's dualist metaphysics. As we have seen, Descartes is able to account for non-entertained memories with the help of two conceptual resources, both of which presuppose his dualism. On the one hand, he does not have to worry about the potential implications of a preservationist-leaning approach as long as the actual representations are merely brain states and not mental states. As the "cerebral search engine" metaphor suggests,

the pineal gland can “search” in the images retained in the brain without the mind forming the corresponding ideas. Similarly, in cases where the interpretation of ambiguous representations (i.e., traces) is needed – as in the case of novelty and attributing sensations to external objects – Descartes can have recourse to intellectual memory, which is an ability of the mind that is independent of the body.

I claim that none of these conceptual resources are available for Spinoza because his monist metaphysics does not allow for either the working of the body independent of the mind, or for the working of the mind independent of the body. That he is aware of these consequences of his monism is clear from the polemical way in which he uses Descartes’s examples. By using the very same examples that Descartes used to argue for intellectual memory, Spinoza argues that he can account for both the retention of non-entertained memories and for the interpretation of ambiguous representations without violating his commitment to the strict isomorphism of mind and body.

Concerning the problem of non-entertained memories, Spinoza takes a generationist approach, which he describes as the ordering of images. That is, when the body is affected in a specific way a specific memory is recollected (for example, traces of a horse bring up the memory of a battlefield). This ordering of images is clearly a disposition or ability, which supports Renz’s claim that a wholesale rejection of dispositions is not a viable interpretation of Spinoza.⁶⁸ However, as we have seen in section 2, this approach has to account for the actual properties that ground this disposition. In this case, these actual properties are the parts that constitute the body. The problem analogous to the pancreas problem is solved in the following way: since humans are normally conscious of their bodies, the actual properties that ground the disposition for generating memories are conscious. In contrast, non-entertained memories are not conscious because they are not actual properties: they are generated only at the appropriate moment. And there is a good reason why the dispositions are not conscious themselves: they are not actual properties themselves, but rather are relations between properties.⁶⁹

Let me explain what I mean by using the analogy of a machine. A machine has parts that remain numerically the same all the time; some of its functions, however, are carried out only when these parts have a particular connection. For example, when some gears touch other gears, the gears remain the same and they always have a relationship – namely, being in a position that allows them to touch each other when slid – but they do not always move. If the machine had consciousness,⁷⁰ it would be conscious of its parts and the workings of its parts all the time. It would not, however, be conscious of the connection of its gears – for example, the fact that they are in a position that allows them to touch each other when slid – but when they slide and start moving the machine becomes aware of this movement. Analogously, the parts of the body and their workings are always conscious in the mind, but the fact that the parts of the body have certain connections (e.g., nerves in the brain tissue can open when other nerves open as well) is not something we are conscious of. In this way the non-entertained memory is a connection of parts of the body that is not conscious. The memory becomes conscious when, for example, the nerves actually open and this movement is

perceived by the mind. In this way, what grounds the disposition can be conscious without the disposition itself being so.

However, this raises the second question: How does the mind distinguish between perceptions and recalled memories? As I have argued, the Cartesian answer that it is identified by intellectual memory is not available. Rather, Spinoza solves the problem in the same way, namely, by relying on the connections between actual properties. As we have seen, Spinoza's answer is that images that lack connections are experienced as new perceptions, whereas images that are connected with other images are experienced as memories. This is a solution that fits well into the overall Cartesian project, given what Descartes says at the end of his *Meditations*:

For I now notice that there is a vast difference between the two [i.e., between waking experience and dreaming], in that dreams are never linked by memory with all the other actions of life as waking experiences are. If, while I am awake, anyone were suddenly to appear to me and then disappear immediately, as happens in sleep, so that I could not see where he had come from or where he had gone to, it would not be unreasonable for me to judge that he was a ghost, or a vision created in my brain, rather than a real man.⁷¹

Here, Descartes states that by the connection between elements of experience the subject can decide whether such an idea comes from experience or is part of a dream or hallucination. Spinoza, however turns the relationship around: while for Descartes it is (intellectual) memory that tests the connections and distinguishes between perception and hallucination, for Spinoza it is the connection of ideas that constitutes the mind experiencing an idea either as perception or as memory.⁷² The mind acquires a new, non-entertained memory when such a connection is formed, and when the mind forms an idea because the connected idea is entertained it remembers the memory. However, when the mind forms the idea either because of some external cause or because an idea is entertained to which it has no previous connection, the idea is experienced as a new perception.

This solution also solves a difficulty in the Cartesian account, namely, the fact that it does not make it clear how intellectual memory can fail. Descartes gives ample description of how corporeal memory can fail: physical traces in the brain can fail to materialize,⁷³ these physical traces can be deformed beyond recognition,⁷⁴ the intellectual memory might fail to recognize them as traces of memory,⁷⁵ or perhaps the pineal gland will fail to “find” the appropriate traces. But there is another way in which the intellectual memory can fail. In Descartes's example a poet might have good enough traces in his brain to recollect a whole line, but his intellectual memory does not allow for him to realize that he is remembering this line and that it was not invented by him.⁷⁶ At this point, it is unclear how this is possible, given that intellectual memory does not rely on material traces.⁷⁷ Spinoza can solve this problem: given that the mind's ability to recognize a token memory as memory depends on the connection of actual mental properties, which are isomorphic to physical properties, and given that physical properties are at the mercy of physical causes and can change

in many ways, this identification can easily fail. When the connections fail to be established or are malfunctioning, the mind can experience the recollection of a past occurrence as a new perception.

This is a modified generationist picture that benefits from the appreciation of the Cartesian distinction between corporeal and intellectual memory, and therefore does not face the problems discussed in section 2 above. This account preserves the advantage of the generationist view in that it does not postulate actual representations in the brain, and therefore does not have to explain why the mind is not constantly aware of memories that are not entertained. Non-entertained memories are abilities of the mind to form particular ideas, which are its entertained memories. On the other hand, this account can explain what grounds this ability of the mind. The ability is grounded in the connections among the parts of the body.

This account also provides an explanation of those texts where Spinoza sounds preservationist: non-entertained memories are preserved – not, however, as actual properties of the body, but as connections between parts of the body. That is, we should conceive of memory traces in Spinoza not as like a physical shape left by a seal in wax, but as like the relationship between gears in a machine. When an external cause – a technician, for example – modifies the machine slightly, some of the gears move to a different position in the machine and thereby receive the ability to move in a slightly different way. This new ability, however, can result in totally new functions of the machine. Similarly, an external cause – for instance, the new perception of a warhorse – modifies the constitution of the human body slightly, and the body thereby receives the ability to react to external stimuli slightly differently – for instance, by recalling the image of a warhorse instead of a draft horse. This new ability, however, can result in a totally new function of the body – for instance, recalling the image of a warhorse every time the subject sees traces of a horse.

To sum up, I argue that interpreting non-entertained memories as the connections (which are not consciously perceived) between parts of the body (which *are* consciously perceived) can account for Spinoza's uses of memory, which are mostly related to the association of ideas and his theory of affects. Spinoza accepts the Cartesian description of corporeal memory, but with a twist. Like Descartes, he accepts that non-entertained memories are stored in the brain as memory traces. Contrary to Descartes, however, he holds that these traces are connections of parts of the body and not actual beings. He accepts the Cartesian description of intellectual memory with a similar twist. Like Descartes, he accepts that particular instances of memories do not have features that identify them as memories. Contrary to Descartes, however, he does not accept that memories are identified by an intellectual memory as instances of memory; rather, they are identified by the context in which they are recalled, i.e., by the connections they have to other ideas.

6. Conclusion

At the beginning of this paper, I raised the question: Given the significant role that memory plays both in Spinoza's theoretical philosophy and in his practical philosophy, what does his theory of memory actually look like? I have shown that although there is textual evidence both for a preservationist and a for generationist

account, neither is compatible with Spinoza's other philosophical commitments. On the one hand, the generationist view presupposes dispositions, which fit uneasily into Spinoza's metaphysical picture. On the other hand, both the generationist and the preservationist views presuppose the retention of some bodily properties. In the case of the preservationist view, these properties are memory traces that represent past occurrences, whereas in the case of the generationist view, these properties ground the disposition of the mind to generate representations of past occurrences. The problem is that on Spinoza's theory of consciousness the mind is conscious of everything that happens in the body (known in the literature as the "pancreas problem"). Yet the same problem can be raised concerning these actual properties of the body: Why is the mind not aware of its properties all the time?

By comparing Descartes's account of memory to Spinoza's, I have shown that it is clear that Spinoza formulated his account of memory as a reaction to Descartes's theory. More specifically, he chose the examples with which he illustrated his account of memory in order to highlight the differences between his own theory and Descartes's. In both cases, Descartes accounts for the phenomenon discussed in the examples by appeal to intellectual memory (i.e., memory independent of the body). In contrast, Spinoza accounts for both cases by appeal to a memory that is both corporeal and mental.

On this basis, I have argued for a revised generationist interpretation of Spinoza's account of memory, according to which the body is the actual physical grounding for the mind's ability to form representations of past occurrences, and the connections that this generated representation has to other representations ensures that the mind perceives it as a memory and not as a new experience. This interpretation has the advantage over earlier views that it does not face the problem analogous to the pancreas problem, since the physical grounding for the disposition of memory is conscious. At the same time, it does not go against everyday experience, since memories, as dispositions, are not conscious all the time.

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References

¹ For the existing literature, see Lin, M., "Memory and Personal Identity in Spinoza", *Canadian Journal of Philosophy* 35/2 (2005): 243–268; Weigel, P., "Memory and the Unity of the Imagination in Spinoza's *Ethics*", *International Philosophical Quarterly* 49/2 (2009): 229–246. Lin discusses the role memory plays in Spinoza's account of personal identity, and Weigel discusses

the role memory plays in different types of imaginative cognition (linguistic reasoning, formation of universal concepts, inductive reasoning, etc.), but neither of them addresses the question of how the retention and recollection of past experiences works according to Spinoza.

² E.g. Marrama, O., “Consciousness, Ideas of Ideas and Animation in Spinoza’s *Ethics*”, *British Journal for the History of Philosophy* 25/3 (2017): 506–525; Marshall, E., *The Spiritual Automaton: Spinoza’s Science of the Mind* (Oxford: Oxford University Press, 2014); Sangiacomo, A., “Adequate Knowledge and Bodily Complexity in Spinoza’s Account of Consciousness”, *Methodos* 6 (2011): 77–104; LeBuffe, M., “Theories about Consciousness in Spinoza’s *Ethics*”, *Philosophical Review* 119/4 (2010): 531–563.

³ E2p12. All references to Spinoza’s works are from Spinoza, B., *The Collected Works of Spinoza*, 2 vols., ed. and trans. E. Curley (Princeton: Princeton University Press, 1988–2016). The usual abbreviations are used: “E” stands for the *Ethics*, followed by the number of the part, then “prae” (preface), “a” (axiom), “p” (proposition), “s” (scholium), “c” (corollary), “e” (explanation), “app” (appendix), “defaff” (definition of affection), and “d” (definition if it is immediately after the number of the part, and demonstration in all other cases). “NS” indicates a part of the text that can be found only in the Dutch translation that was published at approximately the same time as the Latin original, and which Curley judged to have some claim to authenticity. The Latin text is cited from the following edition with the usual abbreviations of volume, page, and line: Spinoza, B., *Opera, im Auftrag der Heidelberger Akademie der Wissenschaften*, ed. C. Gebhardt (Heidelberg: C. Winters, 1925).

⁴ E2p13s.

⁵ The most important contributions to the debate include the following: Bennett, J., *A Study of Spinoza’s Ethics* (Indianapolis: Hackett, 1984); Della Rocca, M., *Representation and the Mind-Body Problem in Spinoza* (Oxford: Oxford University Press, 1996); Garrett, D., “Representation and Consciousness in Spinoza’s Naturalistic Theory of the Imagination”, in *Interpreting Spinoza: Critical Essays*, ed. C. Huenemann (Cambridge: Cambridge University Press, 2008), 4–25; Nadler, S., “Spinoza and Consciousness”, *Mind* 117/467 (2008): 575–601; LeBuffe, M., (2010); Renz, U., *Die Erklärbarkeit von Erfahrung* (Frankfurt am Main: Klostermann, 2010); Marshall, E., (2014).

⁶ For an introduction to historical and contemporary theories of memory, see Michaelian, K. and Sutton, J., “Memory”, in *The Stanford Encyclopedia of Philosophy* (Summer 2017 Edition), ed. E. N. Zalta (Metaphysics Research Lab, Stanford University, 2017),

<https://plato.stanford.edu/archives/sum2017/entries/memory/>, accessed on 14.11.2018.

⁷ For different reconstructions of what a mode is, see Curley, E., *Behind the Geometrical Method: A Reading of Spinoza’s Ethics* (Princeton: Princeton University Press, 1988), 31; Carriero, J., “On the Relationship between Mode and Substance in Spinoza’s Metaphysics”, *Journal of the History of Philosophy* 33/2 (1995): 245–273; Melamed, Y., *Spinoza’s Metaphysics: Substance and Thought* (Oxford: Oxford University Press, 2013), 49–59; Renz, U., (2010), 48–52.

⁸ In the present article I focus on the *Ethics* due to limitations of space.

⁹ Translation modified. The original sentence is the following: “Mens (per corollarium praecedentis) corpus aliquod ea de causa imaginatur quia scilicet humanum corpus a corporis externi vestigiis eodem modo afficitur disponiturque ac affectum est cum quaedam ejus partes ab ipso corpore externo fuerunt impulsae” (Spinoza, B., (1925), II:106.26–29).

¹⁰ For different reconstructions of Spinoza’s account of imagination, see De Deugd, C., *The Significance of Spinoza’s First Kind of Knowledge* (Assen: Van Gorcum, 1966); Blair, R. G., “Spinoza’s Account of Imagination”, in *Spinoza: A Collection of Critical Essays*, ed. M. Grene (Garden City: Doubleday-Anchor Press, 1973), 318–328; Mignini, F., *Ars imaginandi: Apparenza e rappresentazione in Spinoza* (Napoli: Edizioni Scientifiche Italiane, 1981); Garrett, D. (2008);

Renz, U., (2010); Renz, U., “Spinoza’s Epistemology”, in *The Cambridge Companion to Spinoza*, ed. D. Garrett, 2nd ed. (Cambridge: Cambridge University Press, forthcoming).

¹¹ Savan, D., “Spinoza and Language”, *Philosophical Review* 67/2 (1958): 212–225; Weigel, P., (2009): 240.

¹² On the notion of form in Spinoza’s biology, see Jonas, H., “Spinoza and the Theory of Organism”, *Journal of the History of Philosophy* 3/1 (1965): 43–57; Wilson, M., “For They Do Not Agree with Us”, in *New Essays on the Rationalists*, ed. R. J. Gennaro and C. Huenemann (Oxford: Oxford University Press, 2002), 336–352. On the view that the same concept is used in Spinoza’s political philosophy, see Bagi, Z., “Emancipation of the Body in Spinoza’s Political Philosophy: The Affective Integration”, in *The Concept of Affectivity in Early Modern Philosophy*, ed. G. Boros, J. Szalai, and O. I. Toth (Budapest: Eötvös University Press, 2017), 207–220.

¹³ For a detailed discussion of the epistemic status of universal notions in the *Ethics*, see Hübner, K., “Spinoza on Being Human and Human Perfection”, in *Essays on Spinoza’s Ethical Theory*, ed. M. J. Kisner and A. Youpa (Oxford: Oxford University Press, 2014), 124–142; Hübner, K., “Spinoza on Essences, Universals, and Beings of Reason”, *Pacific Philosophical Quarterly* 97/1 (2016): 58–88.

¹⁴ For detailed discussion of the role of idea association in Spinoza’s psychology in general, see Della Rocca, M., “Spinoza’s Metaphysical Psychology”, in *The Cambridge Companion to Spinoza*, ed. D. Garrett (Cambridge: Cambridge University Press, 1995), 244; Steinberg, D., “Knowledge in Spinoza’s *Ethics*”, in *The Cambridge Companion to Spinoza’s Ethics*, ed. O. Koistinen (Cambridge: Cambridge University Press, 2009), 143.

¹⁵ One of the strongest pieces of textual evidence for this view is the following: “Nevertheless, to please them [i.e., those who think that there are never actualized possibilities], I shall show that even if it is conceded that will pertains to God’s essence, it still follows from his perfection that things could have been created by God in no other way or order. [...] So I can turn the argument against them in the following way. All things depend on God’s power. So in order for things to be able to be different, God’s will would necessarily also have to be different. But God’s will cannot be different (as we have just shown most evidently from God’s perfection). So things also cannot be different” (E1p33s). For a detailed defense of this view, see Garrett, D., “Spinoza’s Necessitarianism”, in *God and Nature: Spinoza’s Metaphysics*, ed. Y. Yovel (Leiden: Brill, 1991), 191–218; Griffin, M. V., *Leibniz, God and Necessity* (Cambridge: Cambridge University Press, 2013).

¹⁶ See for example: Curley, E., (1988), 49; Curley, E. and Walski, G., “Spinoza’s Necessitarianism Reconsidered”, in *New Essays on the Rationalists*, ed. R. Gennaro and C. Huenemann (Oxford: Oxford University Press, 1999), 241–262.

¹⁷ For an overview of the different interpretations, see: Newlands, S., “Spinoza’s Modal Metaphysics”, in *The Stanford Encyclopedia of Philosophy* (Winter 2013 Edition), ed. E. N. Zalta (Metaphysics Research Lab, Stanford University, 2013),

<https://plato.stanford.edu/archives/win2013/entries/spinoza-modal/>,

accessed on 14.11.2018. I would like to thank my first and third anonymous reviewers for pushing me on this issue.

¹⁸ For a detailed discussion of this commitment see Lærke, M., “Aspects of Spinoza’s Theory of Essence: Formal Essence, Non-Existence, and Two Types of Actuality”, in *The Actual and the Possible: Modality and Metaphysics in Modern Philosophy*, ed. M. Sinclair (Oxford: Oxford University Press, 2017), 11–44.

¹⁹ For a discussion of the epistemic unreliability of imaginations, see Renz, U., (forthcoming).

²⁰ For an overview of the different contemporary interpretations see Choi, S. and Fara, M., “Dispositions”, in *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), ed. E. N. Zalta (Metaphysics Research Lab, Stanford University, 2016),

<https://plato.stanford.edu/archives/spr2016/entries/dispositions/>, accessed on 18.11.2018.

²¹ For a detailed analysis of the metaphysical account of dispositions in Spinoza, see Renz, U., “Explicable Explainers: The Problem of Mental Dispositions in Spinoza’s *Ethics*”, in *Debating Dispositions: Issues in Metaphysics, Epistemology and Philosophy of Mind*, ed. G. Damschen, R. Schnepf, and K. Stüber (Berlin: De Gruyter, 2009), 79–98.

²² For approaches arguing that Spinoza did not intend to account for consciousness, see Balibar, E., *Identity and Difference: John Locke and the Invention of Consciousness*, ed. S. Sandford, trans. W. Montag (London and New York: Verso, 2013); Miller, J., “The Status of Consciousness in Spinoza’s Concept of Mind”, in *Consciousness: From Perception to Reflection in the History of Philosophy*, ed. S. Heinämaa, V. Lähtenmäki, and P. Remes (Dordrecht: Springer, 2007), 203–222.

²³ Renz, U. (2010), 187–205; Renz, U., “The Definition of the Human Mind and the Numerical Difference between Subjects (2P11–2P13S)”, in *Spinoza’s Ethics: A Collective Commentary*, ed. M. Hampe, U. Renz, and R. Schnepf (Leiden: Brill, 2011), 99–118; Renz, U., “Finite Subjects in the *Ethics*: Spinoza on Indexical Knowledge, the First Person, and the Individuality of Human Minds”, in *The Oxford Handbook of Spinoza*, ed. M. Della Rocca (Oxford: Oxford University Press, 2015), 204–219.

²⁴ I would like to thank my third anonymous reviewer for raising this objection.

²⁵ “Descartes is the philosopher to whom Spinoza is most indebted” (Steenbakkens, P., “Descartes”, in *The Continuum Companion to Spinoza*, ed. W. Van Bunge et al. (New York and London: Continuum, 2014), 63). Descartes is also the only philosopher about whom Spinoza wrote a treatise, and is the author most cited by Spinoza. See also Curley, E., (1988), xi; Melamed, Y., (2013), xiv.

²⁶ See Gábor, B., *Spinoza és a filozófiai etika problémája* (Budapest: Atlantisz, 1997); Douglas, A. X., *Spinoza and Dutch Cartesianism* (Oxford: Oxford University Press, 2015).

²⁷ Clarke, D., *Descartes’s Theory of Mind* (Oxford: Oxford University Press, 2003), 79.

²⁸ Works of Descartes will be cited by volume and page from the edition of Adam and Tannery (abbreviated as AT) and from the Cambridge translation (abbreviated as CSM): Descartes, R., *Oeuvres de Descartes*, ed. C. Adam and P. Tannery, 11 vols. (Paris: Vrin, 1996); Descartes, R., *The Philosophical Writings of Descartes*, ed. and trans. J. Cottingham, R. Stoothoof, D. Murdoch, and A. Kenny, 3 vols. (Cambridge: Cambridge University Press, 1985–1991).

²⁹ AT XI:177–178/CSM I:107.

³⁰ AT VI:55/CSM I:139.

³¹ AT III:84/CSM III:148.

³² AT III:143/CSM III:151.

³³ AT III:479/CSM III:203.

³⁴ AT V:150/CSM III:336.

³⁵ AT XI:360/CSM I:343–344.

³⁶ AT XI:429/CSM I:376; cf. AT I:134/CSM III:20.

³⁷ AT III:20/CSM III:143–144.

³⁸ AT VIIIA:21/CSM I:207; cf. AT III:48/CSM III:146.

³⁹ This depends on whether in a given interpretation a representational state is both a physical and a mental state, or an exclusively mental state.

⁴⁰ For this point I am indebted to Dániel Schmal and the participants in the text-reading seminar held in Szeged in June 2018.

⁴¹ See Clarke, D., (2003), 105. In one isolated case, Descartes even seems to reject the notion of intellectual memory: since retention is in the brain, and intelligible content is independent of bodily movement, it cannot be remembered, and therefore intelligible content has to be thought of again in each case. See AT III:424/CSM III:190.

⁴² “Intellect” is a term for the thinking substance (AT VII:27/CSM II:18) as well as for the faculty opposed to imagination (AT VII:52–53/CSM II:37, AT VII:73/CSM II:51, AT VII:75/CSM II:52, AT VII:79/CSM II:55, AT VII:131/CSM II:94, AT VII:162–163/CSM II:115, AT VII:358/CSM II:248, AT VII:439/CSM II:296). Confusingly, intellect is also the genus opposed to will (AT VII:56–58/CSM II:39–40, AT VII:78/CSM II:54), and its species are imagination and intellect. For the scope of intellectual memory, see Fóti, V. M., “Descartes’ Intellectual and Corporeal Memories”, in *Descartes’s Natural Philosophy*, ed. S. Gaukroger, J. Schuster, and J. Sutton (London and New York: Routledge, 2002), 591–603.

⁴³ AT X:416/CSM I:42, AT III:143/CSM III:151.

⁴⁴ “As for memory, I think that the memory of material things depends on the traces (*images*) which remain in the brain after an image has been imprinted on it; and that the memory of intellectual things depends on some other traces (*vestiges*) which remain in the mind itself. But the latter are of a wholly different kind from the former, and I cannot explain them by any illustration drawn from corporeal things without a great deal of qualification. The traces in the brain, on the other hand, dispose it to move the soul in the same way as it moved it before, and thus to make it remember something” (AT IV:114/CSM III:233). See also AT III:48/CSM III:146, AT III:84/CSM III:148, AT III:143/CSM III:151.

⁴⁵ AT VII:72–73/CSM II:50–51; see also AT VII:131/CSM II:94, AT VII:358/CSM II:248.

⁴⁶ AT III:66/CSM III:148.

⁴⁷ Note that logical axioms themselves are universals: see AT VIII B:359/CSM I:304–305.

⁴⁸ AT III:798/CSM III:216.

⁴⁹ See AT V:137/CSM III:331.

⁵⁰ See Clarke, D., (2003), 105. For a reconstruction of Descartes’s views on intellectual memory in the scholastic context that makes sense of this passage, see Daniel Schmal’s contribution to this special issue.

⁵¹ AT V:150/CSM III:336–337.

⁵² AT VII:160–161/CSM II:113.

⁵³ AT V:220/CSM III:356.

⁵⁴ Note that Descartes’s view developed significantly after the initial publication of the *Meditations*: see AT VII:246/CSM II:172.

⁵⁵ Simmons, A., “Cartesian Consciousness Reconsidered”, *Philosophers’ Imprint* 12/2 (2012).

⁵⁶ AT III:423–424/CSM III:189–190; cf. AT VII:354–355/CSM II:245.

⁵⁷ AT V:220–221/CSM III:357. On the different types of consciousness in Descartes, see Lähteenmäki, V., “Orders of Consciousness and Forms of Reflexivity in Descartes”, in S. Heinämaa, V. Lähteenmäki, and P. Remes (Dordrecht: Springer, 2007), 177–202.

⁵⁸ AT VIII A:35/CSM I:218–219.

⁵⁹ By “dependence” and “independence” I mean the ability to change (or the lack of it) and not the grounding relation (or the lack of it). That is, a mental process is dependent on the body if it can occur only if a corresponding change occurs in the body, and it is independent if this is not the case. This way the Cartesian relation of dependence and independence can be made sense of in Spinoza without violating the causal boundary between attributes. I thank my first anonymous reviewer for pushing me on this issue.

⁶⁰ See E2p7 and its scholium. For different interpretations of mind-body parallelism or identity, see Bennett, J., (1984); Curley, E., (1988); Della Rocca, M., (1996); Della Rocca, M., *Spinoza* (New York: Routledge, 2008); Garrett, D., (2008); Renz, U., (2010); Melamed, Y., (2013); Hübner, K., “Spinoza on Intentionality and Mental Dependence”, *Philosophers’ Imprint* (forthcoming).

⁶¹ E2p18s.

⁶² AT V:150/CSM III:336–337.

⁶³ E2p18s.

⁶⁴ AT V:220/CSM III:356–357.

⁶⁵ AT XI:429/CSM I:376; cf. AT I:134/CSM III:20.

⁶⁶ AT V:220/CSM III:356.

⁶⁷ Of course, he might mean that the lack of a *pre-existing* connection between images constitutes a memory; otherwise no new perception could follow the “order of imagination” – presumably consisting of the connection of ideas – which plays a central role in his epistemology. But discussion of this issue would require another article-length treatment of the role of memory in practical philosophy. On the role of different orders in his epistemology, see Wilson, M., “Spinoza’s Theory of Knowledge”, in *The Cambridge Companion to Spinoza*, ed. D. Garrett (Cambridge: Cambridge University Press, 1996), 89–141.

⁶⁸ Renz, U., (2009).

⁶⁹ For a similar approach, see Malinowski-Charles, S., “Rationalism Versus Subjective Experience: The Problem of the Two Minds in Spinoza”, in *The Rationalists: Between Tradition and Innovation*, ed. C. Fraenkel, D. Perinetti, and J. E. H. Smith, The New Synthese Historical Library 65 (Dordrecht: Springer, 2010), 123–143.

⁷⁰ It is not clear whether Spinoza would accept a machine having consciousness. For some approaches to his alleged panpsychism, see Malinowski-Charles, S., “Emotions as the Engines of Spinoza’s Ethics”, *Kritika & Kontext* 38–39 (2004): 120–125; Garrett, D., (2008); Nadler, S., (2008); LeBuffe, M., (2010); Marshall, E., (2014); Marrama, O., (2017).

⁷¹ AT VII:89–90/CSM II:61–62.

⁷² Due to limitations of space, I cannot discuss here the question of how would Spinoza distinguish between memory and hallucination, which has far-reaching consequences for his theory of prophecy.

⁷³ AT VII:246/CSM II: 172.

⁷⁴ AT V:220/CSM III:356–357.

⁷⁵ AT V:192–193/CSM III:354–355.

⁷⁶ AT V:220/CSM III:356.

⁷⁷ In my view, Descartes’s suggestion that there are traces of a different kind that “remain in the mind itself” (AT IV:114/CSM III:233) does not constitute a viable answer.