

Leibniz on Memory and Consciousness

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Abstract: In this paper, I develop a higher-order interpretation of Leibniz's theory of consciousness according to which memory is constitutive of consciousness. I offer an account of Leibniz's theory of memory on which his theory of consciousness may be based, and I then show that Leibniz could have developed a coherent higher-order account. However, it is not clear whether Leibniz held (or should have held) such an account of consciousness; I sketch an alternative that has at least as many advantages as the higher-order theory. This analysis provides an important antecedent to the contemporary discussions of higher-order theories of consciousness.

Leibniz is commonly thought to have held a higher-order theory of consciousness.¹

According to the higher-order theory, a mental state becomes conscious when another, higher-order, mental state takes it as its object. Put another way, when one has a perception *of* a perception, then one becomes consciously aware of the intentional content of the lower-order perception. The details of the interpretations vary, but, I believe, these basic formulations capture the essence of the higher-order interpretation of Leibniz's theory of consciousness. And, if this interpretation is correct, Leibniz's philosophy will have enduring interest to those currently working on higher-order theories of consciousness.

However, at the risk of raining on the parade, I have my doubts about this interpretation. Elsewhere I have argued that this interpretation, as it has been developed so far, runs afoul of some of Leibniz's more basic metaphysical principles, especially the principle of continuity.² While I do believe this criticism weighs against the higher-order interpretation, there are ways the account can be modified in response to this worry. In this paper, I develop such a modification of the higher-order interpretation—if one considers the role of memory in consciousness, then there is a way of articulating a higher-order theory that does not violate Leibniz's more basic metaphysical commitments. The result is a more robust higher-order interpretation that cannot be easily dismissed. However, in the end, I still believe that even this

memory-based higher-order account does not have a clear advantage. I will argue that the modifications needed in order to strengthen the higher-order interpretation opens the door to a competing interpretation that relies only on the first-order features of perceptions. And once we pursue this option, we will discover that Leibniz's claims about memory and consciousness are not intended to identify a *constitutive relation*. Rather, they identify a *conceptual relation*.

1. The Challenge

There are two main lines of objection to which any higher-order interpretation must be sensitive. The first I shall call the Continuity Problem. If the higher-order perceptions that constitute a conscious mental state arise and depart discontinuously (as, arguably, they would in the versions of the higher-order theory presented in the secondary literature), then the interpretation would entail a discontinuity that Leibniz could not accept—we should favor an interpretation that does not entail such discontinuities.

The second line of objection I shall call the Extension Problem. Leibniz's ontology is replete with higher-order perceptions—even the lowest of the bare monads has higher-order perceptions.³ And so, if consciousness is explained and constituted by the presence of a higher-order perception, then all mental states will be conscious mental states and all substances will be conscious substances. This is a clearly un-Leibnizian result and is undesirable for any interpretation of Leibniz's theory of consciousness. We might conclude that higher-order perceptions cannot fully explain consciousness.

But the higher-order theorists have a ready reply to this last objection: it is not just *any* higher-order perception that results in consciousness; it is a higher-order perception of the relevant sort. And I discern in the literature two main suggestions for what the relevant kind of higher-order perception might be: (a) memory or (b) reflection. If the defenders of the higher-

order interpretation are able to give an account of memory or reflection that is localized in the way that consciousness is thought to be for Leibniz (i.e., limited to certain kinds of substances, and, in them, only to some perceptions), then my second objection will lose its force.

Further, if the account of memory or reflection also satisfies the principle of continuity, then my first line of objection will also fail. And so, it is necessary to consider these two possibilities and determine whether there remains a satisfactory account of the higher-order interpretation. In the present paper, I will consider whether Leibniz had a memory-based theory of consciousness that will answer these objections.⁴

One advantage of pursuing this line of inquiry is an investigation of Leibniz's theory of memory. Memory plays a significant role in Leibniz's philosophy of mind and in his theory of personal identity. For example, in his *Theory of Abstract Motions*, Leibniz distinguishes body from mind by appealing to memory: body, he says, is a "momentary mind" (*mens moentanea*), lacking memory.⁵ Likewise, when Leibniz discusses immortality and moral agency, he appeals to memory again: it is "memory or the knowledge of this 'I' which makes it capable of punishment or reward."⁶ Given these and similar passages, Leibniz's theory of memory is interesting in its own right. All of this is generally acknowledged.⁷ However, there has not been much attention in the recent literature to a systematic account of Leibniz's theory of memory.

With that in mind, I will first provide a fairly detailed account of Leibniz's theory of memory. Leibniz has a fairly complex account of memory, and any reconstruction must be sensitive to the technical distinctions that he makes. After providing an interpretation of Leibniz's concept of memory, I will consider how a memory-based higher-order theory of consciousness might work—I will develop a higher-order theory based on Leibniz's theory of memory that will fully satisfy the principle of continuity. Such an interpretation has not been

presented in the secondary literature, to my knowledge, but I will develop this account in response to the two main lines of objections I have raised against the theory. If I were a higher-order theorist, *this* is the version of the account that I would hold. But, as I say, it is not clear that it has the upper-hand in the end. But developing this modified account will be instructive for a full assessment of Leibniz's theory of consciousness.

2. Leibniz's Concept of Memory

When we look at Leibniz's definitions of memory, we discover that all is not as neat and clean as one would hope. The various definitions that Leibniz provides, in early and later periods, are all over the map. They range from definitions that could be applied to all substances to definitions that would restrict memory to certain types of substances (in some cases restricting it to souls and above, in other cases restricting it to minds). And these various uses of the concept of memory show up in all periods. I will consider each main possibility below, and then I will suggest a way to make sense of the texts. To get a little ahead of myself, I do believe that Leibniz distinguishes three different *types* of memory, and I will present evidence to support this view.

2.1. *Memory in all substances?*

Leibniz frequently describes memory in terms of the mere repetition of perceptions. Consider the following texts:

M1. [B]ody lacks memory; it lacks the perception of its own actions and passions; it lacks thought.⁸

M2. Memory is the perception of one's own perceptions.⁹

The concept of memory in use in these passages is sufficiently broad to entail that all substances would have memories. Of course, this is not straightforwardly so, since these definitions are early (1671 and 1678-80/81, respectively) and it is an open question to what extent Leibniz had

his theory of substance worked out in his earlier period. But these definitions do demonstrate a sort of higher-order thought theory of memory: a memory is simply the perception of a perception. But, given the breadth of these definitions, and the objections raised in the section above, one might worry whether these are adequate definitions of memory. For one, notice that there is no distinction between a memory and any other sort of higher-order thought, something that Leibniz will later distinguish. For example, what distinguishes memory from reflection, based on these definitions?

One might be tempted to dismiss these as anomalous. However, there are similar definitions given in later periods that correlate with these definitions. Consider the following passage from a letter to Arnauld:

M3. There is no stronger demonstration, not only that our souls are indestructible, but also that it preserves always within its nature the traces of all its preceding conditions with a *virtual memory* [*souvenir virtuel*] which can always be awakened because the soul has consciousness of, or knows within itself, that which each one calls “myself”. It is this that makes it capable of moral qualities and of punishment and reward, even after this life. For without memory immortality would be worthless.¹⁰

Here Leibniz refers to the “traces of all [of a substance’s] preceding conditions” as a “virtual memory.” If all substances express all of their previous states, as Leibniz believes that they do, then all substances have, minimally, a virtual memory. Now this may not be committing to much, since this may simply be a *façon de parler*, and Leibniz’s theory of memory would not count the *mere disposition* as a memory. According to this letter, it seems, the actualization of the potential to have a memory itself requires reflection, since it requires the reflective knowledge of the self. But any substance that does not have reflection would still have traces of

all its preceding states, and in this sense would have a virtual memory.¹¹ And this virtual memory is arguably a higher-order state: retaining occurrent representations of all prior perceptual states.

Further evidence of this fundamental form of memory can be found in the *New Essays*:

M4. I am surprised that it has not occurred to you that we know an infinity of things which we are not aware of all the time, even when we need them; it is the function of memory (*mémoire*) to store them, and of recollection (*réminiscence*) to put them before us again.¹²

This passage suggests that memory, in one sense, is simply the storage of the traces of prior perceptions. It is a different act, here referred to as recollection (*réminiscence*) that brings the stored perceptions back to a level of awareness. Given the context of this argument—Leibniz is using memory as an example of the many ideas we may have, though not be aware of, in support of his argument for innate ideas—we must grant that the faculty of memory may store perceptions that are *never* brought back to awareness. Leibniz argues that this is so of some innate ideas—some are innate in us, although we may *never* bring them to mind.¹³ This does not entail that we *don't have the ideas*. The possession of innate ideas does not depend on one's ability to bring them to mind. Similarly, *mutatis mutandis*, for memory. The having of a memory does not require the ability to bring it to mind, and, as Leibniz suggests in this passage, the pre-established harmony entails that we do in fact have memories that are not brought to mind.

If it is sufficient for memory that we can remember *some* things though we never bring them to mind, it seems that there is nothing preventing us from saying that a substance may have stored memories, *none of which* are ever brought to mind. In this sense, then, all substances have memories, and this sense of memory correlates roughly with the definitions Leibniz gave of memory in the 1670s—it is a perception of a prior perception.

2.2. *Memory restricted to rational substances*

During a period in the 1680s, Leibniz clearly restricted memory to rational substances alone, believing that memory requires or is identical with reflection (a possibility we noted in the earliest definitions, M1 and M2, above). The following passage presents this very clearly:

M5. It is memory or knowledge of this “I” which makes it capable of punishment and reward. Likewise, the immortality which is demanded in morals and religion does not consist merely in this perpetual subsistence which is common to all substances, for without a memory of what one has been, there would be nothing desirable about it.¹⁴

This identification of memory with the knowledge of the self leaves very little room for dispute, and the moral consequences he derives from this would clearly not apply to animals or lower substances. But, as we noted in our discussion of the 4/14 July 1686 letter to Arnauld (quoted as M3 above), Leibniz backs off from this claim a little bit. In his letter to Arnauld, Leibniz says that the *traces* of prior perceptual states constitute a virtual memory, but the realization of the memory depends on reflection: the virtual memory, Leibniz says, “can always be awakened because the soul has consciousness of, or knows within itself, that which each one calls ‘myself.’” It is not clear from these passages what connection Leibniz thought the knowledge of the self had to the actualization of memory.

One possibility that has been presented in the literature is the thought that memory requires a knowledge that the prior perception *was one’s own*. The following passage, from the same period, might support this view:

M6. [...] to perceive that one perceived, or to remember [...].¹⁵

Remembrance here is not just a perception of a prior perception—it is an attitude towards prior perceptions *as one’s own*.¹⁶ Thus, on this view, the mere *storage* of perceptions is not sufficient

for memory, and, further, the mere *repetition* of a perception without the knowledge that one has had it before would also be insufficient for memory.

There is some plausibility to this view, particularly in connection with Leibniz's moral philosophy. The persistence of the moral identity requires a robust notion of memory if one is to view it as licensing praise and blame, for the individual must not only have a recurrence of perceptions but be able to *own* the perception and thereby take responsibility for what is represented in the memory. I will discuss the connection of memory with moral identity in more detail below. For now, it is sufficient to see Leibniz's motivation for this strand of definitions.

We have considered a more general definition of memory, in which memory would be attributed to all substances, and a more restricted definition, in which memory would be specific to rational substances. In the next section, I will consider one more strand of texts in which Leibniz tries to work out a middle ground.

2.3. Memory restricted to souls and higher substances

Most frequently, Leibniz says that memory comes along with sensation, and thus is restricted to sentient souls and higher substances. Here are two characteristic passages:

M7. [W]hen a monad has organs that are adjusted in such a way that, through them, there is contrast and distinction among the impressions they receive, and consequently contrast and distinction in the perceptions that represent them [in the monad...] then this may amount to *sensation*, that is, to a perception accompanied by *memory*—a perception of which there remains an echo long enough to make itself heard on occasion [...]. It is true that animals are sometimes in the condition of simple living things, and their souls in the condition of simple monads, namely when their

perceptions are not sufficiently distinct to be remembered, as happens in a deep, dreamless sleep or in a fainting spell.¹⁷

- M8. Memory provides a kind of sequence in souls, which imitates reason, but which must be distinguished from it. We observe that when animals have the perception of something which strikes them, and when they previously had a similar perception of that thing, then, through a representation in their memory, they expect that which was attached to the thing in the preceding perception, and are led to have sensations similar to those they had before [...].¹⁸

These passages clearly attribute memory to animals, but they make no claims about *reflection* in animals. In fact, it seems clear that there is no requirement for reflection in these cases—Leibniz goes on in the *Monadology* to say that reflection is what distinguishes humans from the animals.¹⁹ All that appears to be entailed by these passages is that the prior perceptions are (actually) brought back to awareness.

Leibniz does provide some analysis of why some perceptions are recalled rather than others—it is because these perceptions are “sufficiently distinct”; they are impressions that were strong enough to return an echo on future occasions. So it seems that memory is crucially related to perceptual distinctness—at some level of distinctness, there is a strong enough trace for it to stand out against the field of prior perceptions. Leibniz says this in *Monadology* §27: “the strong imagination that strikes and moves [animals] comes from the magnitude or the multitude of the preceding perceptions. For often a strong impression produces, all at once, the effect produced by a long *habit* or by many lesser, reiterated perceptions.”²⁰

2.4. *Bringing the strands together*

The previous three sections explored three strands of texts in Leibniz, each providing a different extension to the term ‘memory.’²¹ There are a number of interpretive strategies available at this point. We may say (a) that Leibniz equivocated on the term; (b) that Leibniz’s views changed over time; or (c) that Leibniz held all three in conjunction with one another, subsuming them under a more general term. Strategy (a) is, of course, not desirable—to be charitable to Leibniz, we should not charge him with equivocation until other strategies fail. There is some evidence that might lead one to favor (b), particularly given the fact that the close connection of memory and reflection is isolated to a particular period. However, there is one additional text that I’d like to consider that will lead us, I think, to affirm (c). In this one text, Leibniz brings two of the three views together. This text, coupled with other later texts, will show that Leibniz made use of all three concepts of memory in his mature philosophy.

The key text I’d like to consider is from the *New Essays*. This passage distinguishes the uses of the concept of memory and provides some technical vocabulary that will help differentiate the three main uses of the concept.

M9. I shall say then that it is *sensation* when one is aware of an outer object (*s’aperçoit d’un objet externe*), and that *remembrance* (*réminiscence*) is the recurrence of it [i.e., the sensation] without the return of the object; but when one knows that one has had it [the sensation] before, this is *memory* (*souvenir*).²²

When we take this text, along with the text quoted above as M4, we will be able to draw the necessary distinctions. I will quote M4 here again:

M4. I am surprised that it has not occurred to you that we know an infinity of things which we are not aware of all the time, even when we need them; it is the function of memory (*mémoire*) to store them, and of recollection to put them before us again.²³

Here are what I will consider three technical terms that we can use to sort out Leibniz's uses of the concept of memory.²⁴ *La mémoire* is the "storage" of perceptions, which Leibniz often describes using the "traces" metaphor. Leibniz elsewhere makes it clear that by "traces" he means nothing more than "relations, expressions, representations; that is, the effects by means of which some past cause can be known."²⁵ Thus, *mémoire* will be a general category, applying to any representation of a prior state of the substance. Even bare monads have *mémoire* for Leibniz, since all monads have representations of all prior perceptions, whether or not any of those representations are conscious representations. As we've seen, Leibniz sometimes calls this form of memory "virtual memory"²⁶ or a *disposition* to recall prior states.²⁷

La réminiscence is the conscious repetition of a prior perception. This is the form of memory that comes with sensation. Given the connection with sensation, we may say that the repetition of the prior state is a *conscious* repetition, since consciousness, in my view, comes along with sensation. Although I have not provided full textual evidence for the connection between sensation and consciousness—and it is certainly controversial²⁸—I think that it is sufficient for my purposes in distinguishing three kinds of memory to separate the mere repetition of a prior thought from a *conscious* repetition of a prior thought. If one isn't willing to grant the connection of sensation and consciousness, then we could easily adjust the terms such that *réminiscence* does not require consciousness, but then *réminiscence* will itself admit of a division into those repetitions that are conscious and those that are not. Instead, I prefer to allow the technical terms to track the divisions.

What *is* clear, however, is that *réminiscence* does not require reflection or knowledge of the self. The repetition of the perception is an impersonal repetition, so to speak—not entailing the knowledge by the subject that *it* has had the perception before. Indeed, *réminiscence* doesn't appear to require a higher-order interpretation at all. All that is required is a repetition of the perception, with its original intentional content, without the intentional object itself being present. As Leibniz says in passage M9 above, “*remembrance (réminiscence)* is the recurrence of [the sensation] without the return of the object.”²⁹ I will return to this point in the discussion below.

Le souvenir, finally, involves the reflective knowledge of oneself in the memory, recognizing the memory as one's own. This form of memory necessarily involves self-reference, and thus, as with the definition from the *Discourse on Metaphysics*, it entails a moral identity.

These three technical terms, introduced by Leibniz in response to Locke's definitions, provide a way of supporting the thesis that Leibniz allowed memory of a sort to all substances. That is not to say that Leibniz was consistent in his use of the terms in texts other than the *New Essays*—we cannot use the terms themselves as guides to sort out the other texts. But, insofar as the concepts match up with the technical definitions Leibniz provides, we can use them to make sense of Leibniz's theory.

Simple substances have *mémoire* and nothing else. Substances that have sensation also have *réminiscence*, and rational substances alone have *souvenir*. So, although all substances have memory, we can still make rigorous distinctions about the *type* of memory any given substance might have, and this may help us determine whether memory of some sort is constitutive of consciousness.³⁰

3. The Higher-Order Interpretation

With this sorting out done, we can now narrow down the problem facing the higher-order interpretation. Which form of memory will suffice for consciousness, if any? By way of answering this question, I will develop a memory-based account of the higher-order interpretation that avoids the objections I have raised against it. As far as I can see, this will be the best strategy available to those who favor the higher-order interpretation.

In defense of the higher-order interpretation of Leibniz's theory of consciousness, Rocco Gennaro appeals to the following passage:

We can be deceived by a memory across an interval—one often experiences this and one can conceive of a natural cause of such an error. But a present or immediate memory, the memory of what was taking place immediately before—or in other words, the consciousness or reflection which accompanies inner activity—cannot naturally deceive us.³¹

Memories, Gennaro claims, will serve as the relevant higher-order thought that explains consciousness. Not just *any* memory, of course, since memories can be false. But an *immediate* memory, Leibniz says, cannot be false and it is this that he here describes as consciousness.

Gennaro summarizes:

Leibniz is saying that what makes the perception conscious is a memory of it, which clearly entails that there is a higher-order state directed at the perception. If a perception occurs without the accompanying memory or higher-order state, then it will be one of our many nonconscious perceptions. On the other hand, the second-order state is a memory or “record” of a first-order state that has occurred immediately prior to it. Thus, “the immediate memory of a perception” sounds very much like “the apperception of a

perception” and thus a kind of self-consciousness that makes the lower-order perception conscious.³²

The strategic advantage of this move is obvious. In order to avoid the Extension Problem, Gennaro may appeal to the fact that not just *any* higher-order perception will do—it must be an *immediate memory* of the prior perception. Provided that there are no *unconscious* perceptions that are the objects of an immediate memory and provided that immediate memory doesn’t generalize in some way to lead us back into the Extension Problem, this clarification will allow Gennaro to provide a principled way of identifying the relevant higher-order thoughts that are considered explanatory (or constitutive) of consciousness.

Recall what must be true of the relevant higher-order thought in order for it to avoid the extension problem:

(A) The relevant kind of higher-order thoughts must occur only in conscious substances.

(B) The relevant kind of higher-order thought must be restricted within the (finite) conscious substance, explaining the localization of consciousness. (I.e., it should not result in *all* (or even too large a number of) perceptions being conscious perceptions.)

It seems on a first pass that these two conditions may be met by memory. In support of (A), we might cite the passages that define sensation as a “perception accompanied by memory.”³³ This is thought to be the defining feature of sentient beings, which are also those that are thought to be conscious. Since bare monads don’t have sensation, they also do not have memory. Likewise, in support of (B) we could appeal to the same passages and to the preface of the *New Essays*, where Leibniz argues that sensation arises from the confusion of smaller perceptions of which we are not aware. Since these smaller perceptions are not *sensed* in the way that, say, the sound of the wave is sensed, the appeal to memory can account for the localization of consciousness.

While Gennaro's interpretation of the "immediate memory" passage has some initial plausibility, as I have just sketched, it also has significant problems. According to Gennaro, "Leibniz is saying that what makes the perception conscious is a memory of it, which clearly entails that there is a higher-order state directed at the perception." It may be true that if what makes a perception conscious is a memory of it, then that perception will have a higher-order state directed at it (provided we allow for higher-order states that are not co-occurrent with the lower-order state). But this cannot be the salient detail.

Consider Leibniz's frequent claims that each monad expresses all that has happened to it and all that will ever happen to it—"the present is pregnant with the future; the future can be read in the past; the distant is expressed in the proximate."³⁴ This is true of *all* monads, not only the monads that are thought to be conscious monads. Thus, if the perception of a prior perception is sufficient for a higher-order thought of that perception, then it follows that all prior perceptions are the objects of higher-order thoughts. But it clearly does not follow from this that all prior perceptions are *conscious* perceptions.

To read Gennaro's thesis most charitably, we must say that not just *any* higher-order perception will be sufficient for consciousness—on his own terms we must restrict the relevant higher-order perceptions to those of a certain type. And there may still be room in Leibniz's theory of mind to distinguish *memories* of a prior mental state from *mere perceptions* of a prior mental state. Both will involve higher-order perceptions, in Gennaro's sense, but (perhaps) only memories are constitutive of consciousness. In order to develop this possibility (something Gennaro does not do), we will have to consider the distinctions introduced in the previous section and see whether it allows for the localization of consciousness in the way that the higher-

order interpretation requires, and, if so, whether Leibniz believed it constitutive of consciousness.

Turning now to the question, which form of memory will suffice for consciousness, let's quickly set aside *mémoire*. It is clear that this will not do, since *all* substances have *mémoire* and *all* prior perceptions are objects of *mémoire*. To suppose that *mémoire* would serve as the relevant higher-order thought for consciousness would be to commit to the view that consciousness extends to all perceptions and to all substances, which is clearly not Leibniz's view.³⁵ Insofar as the perception of all of a substance's prior states follows formally from Leibniz's theory, it follows that all substances have memory of a sort, but it should not follow from this fact alone that all substances are conscious. This would be to fall headlong into the Extension Problem.

It seems we can also set aside *souvenir*, although not as quickly. Initially, it seems that *souvenir* will be too restrictive, entailing that only rational substances are conscious substances, since only rational substances have *souvenir*. However, there are two qualifications to be made here: Firstly, the text that Gennaro appeals to in support of his interpretation of Leibniz's theory of consciousness uses the term *souvenir*, and this is in the text in which Leibniz took pains to distinguish *souvenir* from *réminiscence*. The English translation of the key passage is this:

M10. [A] present or immediate memory, the memory of what was taking place immediately before—or in other words, the consciousness or reflection which accompanies inner activity—cannot naturally deceive us.³⁶

Gennaro takes this text to be analyzing consciousness in terms of memory—a mental state is conscious because it is the object of an immediate memory. However, here is the text in French:

[L]e souvenir present ou immediat, ou le souvenir de ce qui se passoit immediatement auparavant, c'est à dire la conscience ou la reflexion, qui accompagne l'action interne, ne sauroit tromper naturellement.

Notice two things about this passage: 1) as I have already mentioned, the term used here is *souvenir*, which Leibniz earlier in the same text restricts to rational individuals, those substances that have reflective knowledge; and 2) Leibniz here uses the term *conscience* rather than the other term that he coined in this book, *apperception*. This is the only section of the *New Essays* where he uses the term *conscience* rather than *apperception*. One page prior to this passage, Leibniz defines consciousness (*conscienciosité*) as “the sense of *I* [that] proves a moral or personal identity.”³⁷ Once again, as in the *Discourse on Metaphysics* passages quoted above, Leibniz is here concerned with the consciousness and memory that preserves the moral identity, and this is unique to rational substances. Thus, at best, the identification in this passage is an identification of a *kind* of consciousness (one that is identical with reflection) with a *kind* of memory. I doubt that this analysis will go through even for rational substances, but let’s grant it for now for the sake of argument and see what follows from it. If Leibniz is here identifying consciousness and memory in rational subjects, why would he not do the same in lower substances? He may be identifying *conscienciosité* with an immediate *souvenir* in the same way that he would identify *apperception* with *réminiscence*.³⁸

So, it seems that the main textual evidence in favor of the analysis of consciousness in terms of memory is specific to rational substances. Are lower conscious substances analogous to rational substances here? Is conscious awareness in animals to be analyzed in terms of *réminiscence*? There is a Latin text that lends support to this thesis. In a lengthy “*Table de*

Définitions,³⁹ under the subheading “*Accidentia Sensitiva: Sensus Interni*,” Leibniz includes these definitions:

M11. *Thought* is sensation with a representation or idea: it contains all three operations.

Memory is the repetition of thought arising from prior thought.

Experience is many similar memories.⁴⁰

Then, under the subheading “*Accidens Rationale: Actus Intellectus Primi*,” he lists the following:

M12. *Consciousness* [*conscientia*] is reflection on action, or memory of our action, in order that we think it to be ours. This involves true substance itself or *the I*.⁴¹

Couturat dates this text at 1702-1704, the same time period that Leibniz was working on the *New Essays*. It is rather tempting to view a parallel between the Latin and French texts:

| CONSCIOUSNESS | MEMORY |
|--|---|
| FRENCH: <i>conscience</i> LATIN: <i>conscientia</i> | FRENCH: <i>souvenir</i> LATIN: <i>memoria actionis nostrae</i> |
| FRENCH: <i>apperception</i> LATIN: <i>experientia</i> | FRENCH: <i>réminiscence</i> LATIN: <i>memoria</i> |

Sentient substances have *experientia* when there are many similar memories. But *conscientia* is restricted to rational substances, since it involves reflection. But both are described in terms of memory, in the one case, the mere repetition of many memories—note that in the case of sensitive substances, the memory is defined in terms of sensation, so *experientia* would not extend to non-sensitive substances. In the other case, for rational substances, the memory is a memory of our actions; it necessarily requires reflection.

This interpretation is a bit speculative, and we’ll have to consider additional texts to determine its merit, but in order to give the best possible consideration for the higher-order interpretation, we should consider this possibility. The importance of this text is in its analysis of

consciousness in terms of a kind of memory, and thus consciousness will be constituted by a memory of a prior perception. Of course, the analysis of consciousness in animals here is not in terms of a memory *simpliciter*—Leibniz says it is “many similar memories.” We can see here a hint of an account of the efficacy of a memory, conjoining of many memories together so that the result will be more noticeable. A single memory is not always sufficient for experience—one needs the conjunction of many similar memories. And it is this sort of unifying function that forms the basis for the increase in the distinctness of perceptions in sensation. Thus, we might say that *distinct* memories are constitutive of consciousness.⁴²

If I were to endorse a higher-order interpretation of Leibniz, this would be it. All immediately prior perceptions are the objects of memories (in the *mémoire* sense), but only some of those memories will be distinct (and thus will count as *réminiscences* or *souvenirs*). Thus, consciousness on this version of the higher-order interpretation will be constituted by a distinct lower-order perception (since only distinct perceptions are the objects of consciousness) and a distinct higher-order perception, viz., a distinct memory. This version of the higher-order interpretation answers both of the objections I raised in Section One. It avoids the Extension Problem, since we’ve identified the relevant higher order perceptions that constitute conscious perceptions, and this gives us a principled way of explaining the localization of consciousness. It also avoids the Continuity Problem, since the distinctness of a memory can arise by degrees.

Thus, on this interpretation, the higher-order thought alone does not explain consciousness—it is the *distinctness* of the higher-order thought that is explanatorily relevant. This conclusion is very instructive, since it opens the door for an alternative account of consciousness. If variations of distinctness can explain consciousness on the second-order level (as I have argued it must for an adequate memory-based higher order account), then why couldn’t variations of distinctness

on the *first-order* level explain consciousness? Could it be that at some level of distinctness a first-order perception becomes a conscious perception, just as with the memory-based account at some level of distinctness a higher-order perception becomes the sort of memory sufficient for consciousness? I don't see much motivation for an appeal to distinctness on the higher-order level rather than the lower-order level. This higher-order interpretation has simply repeated the problems on the second-order that were already present on the first order, and Occam's razor could well weigh in favor of a first-order account. Of course, these considerations don't show that Leibniz *would* in fact favor a first-order account, but it does put some philosophical pressure on those defending a higher-order interpretation to tell us why he wouldn't.

One possible response to this objection, though, is that this higher-order interpretation allows us a more principled way of identifying the threshold of consciousness. Leibniz's principle of continuity entails that differences in kind *are* differences in degree, with the transition at the infinite or the infinitesimal.⁴³ But, as I described a possible first-order account of consciousness, I said that *at some level* of distinctness a perception would become conscious. But at what level? Many of Leibniz's examples, such as being awakened from a deep sleep, suggest that the level of transition is at some non-zero, mid-level threshold. This gives us a disanalogy with other transitions in kind, since, as I've said, elsewhere Leibniz says that transitions in kind occur at the point of the infinite or the infinitesimal. While there may be some things that could be said in defense of a first-order account here, let's set that aside for now to see how the memory-based higher-order account of consciousness would respond to the same sets of worries. *Prima facie*, there doesn't appear to be the same sort of pressure against this revised higher-order theory, at least not until we have some sense for what explains the distinctness of a memory. At least intuitively, it seems possible for the distinctness of the lower-order perception and the

distinctness of the memory to come apart. Perhaps the transition in kind, from unconscious to conscious perception, occurs at the point of the infinitesimal—when a memory becomes distinct to any degree.

The model, then, is this: there are a number of indistinct memories (distinctness value of zero, although they are present in the mind representing prior perceptions), but when the object of some memory becomes sufficiently distinct the memory itself becomes distinct. At this point, at the point of the infinitesimal, consciousness arises and is constituted by a distinct perception conjoined with a distinct memory (or, to use the technical vocabulary introduced earlier, a *réminiscence*). This nicely fits the model of continuous transitions in Leibniz, and, given the fact that we aren't postulating the coming into existence of a new memory where there was none before, this model doesn't appear to violate the principle of continuity and the Continuity Problem is avoided. Consciousness would arise by degrees because the distinctness of a memory would arise by degrees. We could make sense of degrees of consciousness now in terms of the degrees of distinctness of the memory.

As a result, the intuitive examples Leibniz provides us, in which consciousness arises at some mid-level, are still explained by a continuous transition at the point of the infinitesimal. And so, the revised higher-order theory I have proposed alleviates a set of worries that might arise on a first-order account of consciousness.

Nevertheless, I still have my reservations about this account, although now they are not fully decisive. Here's where I believe more must be said to fully defend the view: it seems to me that this model introduces an unusual lack of parallelism between a perception and its immediate memory. Without this lack of parallelism, the point of transition still remains only partially explained—why should the “present or immediate” memory become distinct only at *some level*

of distinctness of the lower-order perceptions? Why shouldn't it become distinct *as soon as* the lower-level perception it represents becomes distinct? In fact, it seems to me, since we are referring to *immediate* memories as constitutive of consciousness, the two should not come apart. Leibniz identifies a number of factors that enter into the distinctness of a lower-order perception, including such lower-level features as size, number, and variation. A similar account, it seems, should apply to the higher orders as well. Let's take one of these factors, the *number* of perceptions, as an example and see if there is a way to explain the lack of parallelism between the distinctness of the lower-order and higher-order perceptions.

In the definitions above, *experientia* was defined as "many of the same memories," a clear reference to the aggregation of similar perceptions. But *memoria* there was defined simply as the "repetition of thought arising from prior thoughts." Thus, what would account for the similarity among memories? It would be the similarities of the prior perceptions. But the similarity of the prior perceptions is precisely what enters into the distinctness of those prior perceptions. Thus, if a number of perceptions are similar, they will be conjoined and become distinct. And, the memories of those prior perceptions would *also* be similar (because the prior perceptions were similar) and so they would be conjoined and become distinct as well. Whatever it is about the first-order perceptions that account for their distinctness will also account for the distinctness of the immediate memories of those perceptions.⁴⁴ This argument would apply similarly to other first-order factors such as size and variation. Thus, the distinctness of immediate memories and the distinctness of the prior perceptions would not come apart.

Given this, then, the higher-order interpretation is on no better footing when it comes to explaining the transition from non-conscious to conscious thought. While I concede that this interpretation would honor the principle of continuity, it fails to sufficiently distinguish itself

from the lower-order interpretation. If distinctness will do the job at the higher-order level, there is no reason it couldn't do the job at the lower-order level. In fact, as is sketched in the argument above, it is the distinctness on the lower-order level that explains the higher-level distinctness of immediate memories.

Additionally, insofar as consciousness is explained in terms of *réminiscence*, it is not obvious that this would be a *higher-order* interpretation. As I mentioned when I introduced the term, *réminiscence* is not necessarily a higher-order perception. In M9 above, *réminiscence* is described as the repetition of a sensation without the object of sensation being present. And in the definition in M11, memory is described as “the repetition of thought arising from prior thought.” If mere repetition is all that is needed, it is not clear that it is a higher-order state. It is simply a *recurring* perceptual state and doesn't introduce the sort of structuring of perceptions that the higher-order theory requires.⁴⁵

4. Continuity and Immediate Memory

In the previous sections I've presented evidence that might favor a particular version of the higher-order interpretation of Leibniz's theory of consciousness. In the final analysis, I said, while this version avoids the objections against the higher-order interpretation that I've raised, it does not have a clear advantage over a lower-order theory of consciousness. (And I raised doubts that it was a higher-order interpretation *at all*.)

That said, it is still unclear how to understand the passages in which Leibniz appears to define consciousness in terms of memory. There are two main texts, both late texts, that provide just this sort of definition—the passages included above as M10 and M12. I'll include these passages again here for our consideration.

M10. [A] present or immediate memory, the memory of what was taking place immediately before—or in other words, the consciousness or reflection which accompanies inner activity—cannot naturally deceive us.⁴⁶

M12. *Consciousness* [*conscientia*] is reflection on action, or memory of our action, in order that we think it to be ours. This involves true substance itself or *the I*.⁴⁷

As I've already mentioned, both of these passages are clear instances of consciousness applied to *rational* substances—they cannot be appealed to in support of a *general* theory of consciousness without further argument. In both cases, not only are the concepts of memory and consciousness involved, but the concept of reflection is involved as well. I know of no text where Leibniz identifies ordinary animal consciousness with some form of memory. And so, *at best*, the higher-order theorist can claim that consciousness is constituted by a form of memory specific to *rational* animals. And this raises questions about whether the nature of consciousness is the same for rational animals as for non-rational animals. Indeed, if there is a discontinuity in Leibniz's system, this is where we should expect it, given the privilege given to moral creatures as capable of citizenship in the city of God. But an answer to this question will require us to say much more about reflection and rationality, which is beyond the scope of this paper.

I think, however, that even for rational substances the identification of consciousness and memory is not so clear. Is Leibniz in these passages saying that memory is *constitutive* of consciousness? I think not. Rather, what Leibniz is highlighting is the *conceptual connection* between consciousness and memory. I will focus first on quotation M10, from the *New Essays*, and what I will say about this passage will then have application to M12 and other similar passages.

The intent of the larger context in which we find quotation M10 is to provide a basis for personal identity over time. Locke's much-discussed account of personal identity in terms of continuity of consciousness is what is being considered. In the passage at issue, Leibniz is providing a criterion for the *continuity* of personal experience. As he says a page later, "it is [the] continuity and interconnection of perceptions which make someone really the same individual; but our awareness [*apperceptions*] – i.e., when we are aware of past states of mind – proves a moral identity as well, and makes the real identity appear."⁴⁸ Thus, at stake here is the continuity of moral identity (notably, something that animals lack).

I will leave aside for now the question of what Leibniz thinks constitutes the moral identity of an individual. What I want to focus on is the dependence of the moral identity on the continuity of consciousness (although not the same sort of continuity that Locke argued for). As I have elsewhere argued,⁴⁹ Leibniz's principle of continuity is grounded by a *conceptual density* in God's mind in creating the natural order (because, as Leibniz says, God acts as the "perfect geometrician, observing a harmony to which nothing can be added"⁵⁰). In God's mind, between any two concepts, there is an intermediate concept:

[A]ll the different classes of beings whose union forms the universe, exist in the ideas of God only as so many ordinates of the same curve, the union of which does not allow the placing of others between them, because that would indicate disorder and imperfection.⁵¹

This conceptual density allows us to conceive limiting cases as merely special instances of bordering species. And so Leibniz says that

[R]est can be considered as an infinitely small velocity or as an infinite slowness.

Therefore whatever is true of velocity or slowness in general should be verifiable also of rest taken in this sense, so that the rule for resting bodies must be considered as a special

case of the rule for motion. If this does not work, on the other hand, this will be a certain sign that the laws are wrongly formulated.⁵²

And this will be true of other distinctions as well—a parabola can be conceived as an ellipse with infinitely distant foci, equality as an infinitesimal degree of inequality, and so on. Likewise, the laws that apply to motion can be applied to rest, considered as a special limit case of motion. Such conceptual connections, I've already noted, arise at the points of infinity and the infinitesimal.

Here, in the passage of the *New Essays* we've been considering, I believe that this principle is at work in Leibniz's definition of consciousness. Consciousness (or the consciousness that accompanies inner activity) can be *conceived as* a memory with an infinitesimal distance between the occurrent perception and its memory. By using the term "immediate memory," Leibniz is saying that consciousness can be conceived as a limit case of memory, at the point of the infinitesimal, and whatever laws apply to memory will also apply to consciousness as a special case. But note also that this is not to say something that is rigorously true—consciousness is not here being *reduced* to memory.⁵³ Rather, he is pointing out the conceptual connection between the two.

This same distinction can be found in an earlier text:

M13. Consciousness is a memory of our actions.⁵⁴

This appears to be a bold identification of the sort that we had hoped to avoid. However, the initial drafting of this line provides some evidence that what Leibniz meant by this was not an *identification*, but rather the *conceptual connection* of the two. Here is the first draft of this sentence:

M14. Consciousness holds to the present as memory holds to the past, or consciousness is memory.⁵⁵

Of course, we cannot know why Leibniz decided to revise the sentence to its more concise formulation, although the final clause of the initial sentence suggests that he did not view them as saying different things. The apparent definition of consciousness as memory is merely a concise way of saying that consciousness and memory are bordering species of the same kind of thing—consciousness applying to the present moment, memory to the past.

Thus, when we arrive at M12, “consciousness is [...] memory of our action,” we can hear the echo of the earlier passage, quoted as M13. And this interpretation coheres well with the results of viewing one as continuous with the other, as in the *New Essays* passage.

If this is right, then we cannot appeal to memory as being *constitutive* of consciousness—that is to miss Leibniz’s point. Leibniz is saying instead that consciousness and memory are continuous with one another and, as such, can be conceived in terms of one another. Thus, what I’ve argued for consciousness will have some bearing on an account of memory, and similarly Leibniz’s account of memory will have some bearing on his account of consciousness. There is no conceptual gap between the two.

As I have said, these passages are referring to rational substances, and the species of memory referred to is *souvenir*. And so, what we are discussing is whether *souvenir* is constitutive of consciousness in rational substances. I have argued that Leibniz does not intend to be making this point—he is saying that consciousness and *souvenir* are continuous species of the same kind of thing. But, of course, if *souvenir* is higher-order, then a form of consciousness that is continuous with it will also be higher-order. But this should not be too disturbing, since the discussion is limited to those substances that are self-aware and can conceive of themselves as

moral subjects. There is a form of *self*-consciousness in moral individuals, and this would plausibly involve higher-order perceptions.

But the question here is whether this would be necessary for a *general* account of consciousness, and I see no reason why it should be. Even if we make a similar claim for animal consciousness, that it is continuous with *réminiscence*, we will not get to a straightforwardly higher-order interpretation. In the next section, I will explore one possible way that memory (generally) might be thought to be continuous with consciousness.

5. Memory and Perceptual Distinctness

It remains, then, to elaborate on Leibniz's account of memory, as it relates to consciousness. I have argued that Leibniz's concept of memory is best understood as a tri-fold distinction: from *mémoire* to *réminiscence* to *souvenir*. I think this tri-fold distinction maps nicely onto the kinds of substances: bare monads have *mémoire* alone; animal souls also have *réminiscence*, and only minds have *souvenir*. Unfortunately, Leibniz is not always careful to distinguish his uses of the concept, and only rarely uses this technical vocabulary himself, but these distinctions make the most sense of the various definitions Leibniz does provide.

The summary version of my interpretation of Leibniz's theory of memory is this: memory is a function of trans-temporal perceptual distinctness in a substance.⁵⁶ Let me unpack this. In the preface of the *New Essays*, Leibniz describes the conscious perception of the sound of the ocean as many contemporaneous small wave-sounds joined together to produce a larger effect, the effect being that they become more distinctive against the backdrop of the larger perceptual field.⁵⁷ Now, whether or not we interpret the transition to consciousness in terms of a first-order or second-order activity, it is clear that there is such a variation in distinctness at the first-order level. The number, magnitude, and variation of contemporaneous *petites perceptions* result in a

confusion or combination of perceptions that presents to the mind what is salient at a given moment.

Memory is like this, except that it is not limited to contemporaneous *petites perceptions*. Over time, given a repetition of like perceptions, some past perceptions become more distinctive against the total perceptual history of the substance than others, given their number, magnitude, and variation. This distinctiveness is what accounts for the transition in types of memory. All prior perceptions are retained in *mémoire*, but the number, magnitude, and variation of trans-temporal *petites perceptions* present to the mind what is salient in its history, resulting in a *réminiscence* or *souvenir*, depending on whether reflection is involved in the memory.

We find Leibniz describing memory exactly in this way:

26. Memory provides a kind of *consecutiveness* to souls which simulates reason but which must be distinguished from it. Thus we see that when animals have perceptions of something which strikes them and of which they have had a similar perception previously, they are led by the representation of their memory to expect whatever was connected with it in this earlier perception and so come to have feelings like those which they had before. When one shows a stick to dogs, for example, they remember the pain it has caused them and whine or run away.

27. The strong imagination which strikes and moves them comes either from the magnitude or from the number of the perceptions which preceded it. For often one single strong impression produces at once the effect of a long-formed *habit* or of many frequently repeated ordinary perceptions.⁵⁸

In this passage, Leibniz explains the behavior of dogs, when shown a stick, by appealing to the magnitude and number of certain perceptions in its perceptual history. *Habit*, he says, is formed

by a frequent repetition of ordinary perceptions (which, by their number, increases their distinctiveness), or by a single very strong perception (which, by its magnitude, increases its distinctiveness).

This interpretation of memory leaves open the possibility I raised earlier. If memory and consciousness are merely continuous kinds, then it seems that consciousness could also be accounted for in a similar way, simply by appealing to variations in distinctness at the first-order level. But it was only by way of clarifying and developing a memory-based higher-order theory of consciousness that this possibility became more prominent. This higher-order account certainly has its merits, as I've described above, and it remains a viable option. However, a first-order account could potentially make sense of all the same phenomena in a simpler way. *Both* memory and consciousness would be functions of the distinctness of a perception, and the distinctness of a perception is a function of several factors, including number, magnitude, and variation. In this way, the two general concepts could be thought of as continuous with one another without entailing a higher-order theory of consciousness.

6. Conclusion

This paper has been fairly heavy-handed with the textual analyses and technical language. Unfortunately, Leibniz's theory of memory is a confusing tangle unless all of this sorting out is done first. So, it may help, in conclusion, to provide a brief summary so that we can assess the lay of the land.

An analysis of Leibniz's theory of memory became important because of the possibility that it would serve as the relevant higher-order thought in a higher-order interpretation of Leibniz's theory of consciousness. I argued that if memory were nothing other than a perception of a prior state, then the appeal to memory in support of a higher-order theory of consciousness would fall

headlong into the Extension Problem—all substances would be conscious and all (immediately prior) mental states would be conscious states. So, we had to refine the view if memory was to do the job.

My suggested refinement was to appeal to a three-fold division in the types of memory, which, I argued, is sufficiently supported by the Leibnizian texts. Absent three English terms that would do the job, it is best to stick with Leibniz's technical terms: *mémoire*, which is the mere representation of a prior mental state; *réminiscence*, which is the conscious repetition of a prior mental state; and *souvenir*, which is the conscious repetition of a prior mental state, along with the knowledge that it was one's *own* prior state. The last, I argued, involves reflection and is thus restricted to rational substances. But, I also argued, *réminiscence* may be sufficient for the purposes of the higher-order theory of consciousness.

An immediate *réminiscence*, could then be constitutive of a conscious mental state without running afoul of the Continuity Problem. However, this account would ultimately appeal to the *distinctness* of the memory and thus would repeat the problems of the lower-order level. If distinctness could account for consciousness on the second-order level, it may serve as well for an explanation of consciousness on the first-order level. Additionally, I argued, it is not clear that this would be a higher-order theory at all, since *réminiscence* requires only repetition of a prior perception and not a perception of a prior perception.

The textual basis for saying that memory is constitutive of consciousness has further problems. In particular, the passages are all restricted to rational substances, for which we would *expect* some appeal to higher-order processes given their capacity for reflection, leaving open the possibility that the consciousness of rational substances differs from that of non-rational substances. But, on the other hand, given Leibniz's claim that animals have something *similar* to

reason through their use of memory suggests a continuity even between rational and non-rational substances. These are important questions, and an answer to them will require us to evaluate the nature of reflection and reason. The centrality of the principle of continuity, however, provides some motivation to expect continuity here, and even provides some insight into what Leibniz is expressing when he says that consciousness is a kind of memory—these concepts are bordering concepts and can be conceived in terms of one another.⁵⁹

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Abbreviations for Primary Texts:

- A Leibniz, G.W. *Sämtliche Schriften und Briefe*, ed. Deutsche Akademie der Wissenschaften (Darmstadt, Leipzig, Berlin: Akademie Verlag, 1923–). Cited by series, volume, page.
- AG Leibniz, G.W. *Philosophical Essays*, eds. R. Ariew and D. Garber (Indianapolis: Hackett Publ. Co., 1989).
- C Leibniz, G.W. *Opuscles et Fragments Inédits de Leibniz*, ed. L. Couturat (Hildesheim: G. Olms, 1966).
- DM Leibniz, G.W. *Discourse on Metaphysics* (A VI.iv.1529-1588 / L 303-30).
- G Leibniz, G.W. *Die Philosophischen Schriften*. Ed. C. I. Gerhardt, 7 vols. (Berlin: Weidmann, 1875-1890). Cited by volume and page.
- GM Leibniz, G.W. *Leibnizens Mathematische Schriften*, ed. C.I. Gerhardt, 7 vols. (Berlin and Halle: Schmidt, 1849-1863). Cited by volume and page.
- L Leibniz, G.W. *Philosophical Papers and Letters*, ed. and trans. L. Loemker, 2nd ed. (Dordrecht: D. Reidel, 1970).
- M Leibniz, G.W. *Monadology* (G VI, 607-23 / AG 213-25).
- NE Leibniz, G.W. *New Essays on Human Understanding*, trans. P. Remnant and J. Bennett (Cambridge: Cambridge University Press, 1996).
- PG Leibniz, G.W. "Extrait d'une Lettre de M.L. sur un Principe Général, utile à l'explication des loix de la nature, par la consideration de la Sagesse Divine; pour servir de réplique à la réponse du R.P.M.," *Nouvelles de la Republique des Lettres*,

(1687) ; also included in G III, 51-55 / L 351-54. Cited by page number in the Loemker translation.

PNG *Principles of Nature and Grace* (G VI, 598-606 / AG 207-13).

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(New York, Macmillan, 1896).

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(Manchester: Manchester University Press, 1967).

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Consciousness," *The Philosophical Review* 101 (2001), 31-75.

Woolhouse, R. and R. Francks (eds.), *Leibniz's 'New System' and Associated Contemporary
Texts* (New York: Oxford University Press, 1997).

¹ For examples of this interpretation, see Rocco J. Gennaro, "Leibniz on Consciousness and Self-Consciousness," in *New Essays on the Rationalists*, ed. Rocco J. Gennaro and Charles Huenemann (New York: Oxford UP, 1999), 353-371, Alison Simmons, "Changing the Cartesian Mind: Leibniz on Sensation, Representation and Consciousness," *Philosophical Review* 101 (2001), 31-75, and Mark A. Kulstad, *Leibniz on Apperception, Consciousness and Reflection* (München: Philosophia, 1990).

² See my paper, "The Principle of Continuity and Leibniz's Theory of Consciousness," *Journal of the History of Philosophy* 47 (2009): 223-248.

³ I will not take the time here to defend this claim, although it seems to me that it follows fairly straightforwardly from Leibniz's Universal Expression thesis—if all substances express the

universe, then presumably they also express themselves and their mental states. One response to my objection may be to find a way to limit Universal Expression in some relevant way, but I don't view this as a promising response. Rather, as I will argue, the better response will be that expression *simpliciter* is not sufficient for consciousness.

⁴ I will leave aside for now the possibility that reflection accounts for consciousness, since I view memory as the more promising approach for the higher-order interpretation.

⁵ §17, A VI.ii.266. See also the November 1671 letter to Arnauld, A II.i(2nd ed.).279: "All bodies can be understood as a momentary mind, but without recollection [*recordatione*]."

⁶ DM §34. Nicholas Jolley argues that Leibniz does not intend a strong memory condition for personal identity. Rather, he argues, Leibniz has the weaker claim in mind that any substance will have "some sense of its past" (Nicholas Jolley, *Leibniz and Locke: A Study of the New Essays on Human Understanding* (Oxford: Clarendon Press, 1984), 138-139). While I don't directly address Leibniz's theory of personal identity in this paper, I do discuss some of the relevant passages related to memory and consciousness below.

⁷ For discussions of the role that memory plays in Leibniz's philosophy, see Nicholas Jolley, *Leibniz* (New York: Routledge, 2005), pp. 98-99; Jolley, *Leibniz and Locke*, chapter 7; Christia Mercer, *Leibniz's Metaphysics: Its Origins and Development* (Cambridge: Cambridge University Press, 2001), pp. 157-166 and 419-427; and Stefano Di Bella, *The Science of the Individual: Leibniz's Ontology of Individual Substance* (Dordrecht: Springer, 2005), pp. 119-125. Of these, Mercer probably comes nearest to making one of the distinctions I will make below, when she distinguishes the memories of "particular states or modifications" of a substance from memories of "ourselves as the persistent thinking things that we are" (420). However, none of these texts gives a full reconstruction of Leibniz's theory of memory. Émilienne Naert, *Mémoire Et Conscience De*

Soi Selon Leibniz (Paris: J. Vrin, 1961), Robert McRae *Leibniz: Perception, Apperception, and Thought*

(Toronto: University of Toronto Press, 1976), and Mark Kulstad, *Leibniz on Apperception,*

Consciousness, and Reflection, give the most careful attention to Leibniz's theory of memory, and I will discuss aspects of their interpretations below.

⁸ "Studies in Physics and the Nature of Body," 1671; G IV, 230 / L 141.

⁹ "*Definitiones Cogitationesque Metaphysicae*," 1678-1680/81; A VI.iv.1394.

¹⁰ To Arnauld 4/14 July 1686; G.II.57 / L 337, emphasis mine.

¹¹ Of course, one might ask in what sense it is thought to be virtual or potential if there is no way for the substance to actualize it. But the argument for virtual memory does not depend on the ability for the soul to bring the memory to mind; rather it depends on the Universal Expression thesis. In the immediately prior paragraph in the letter to Arnauld, Leibniz says that "the concept of an individual substance includes all its events and all its denominations, even those which are commonly called extrinsic . . . from the fact that it expresses the whole universe in its own way," (Ibid). This is what provides the "strong demonstration" that the soul preserves the traces of all of its prior states. This would apply equally to rational and non-rational substances.

¹² A VI.vi.77f / NE 77f, Cf. 106-107, 1705.

¹³ Cf. A VI.vi.79 / NE 79.

¹⁴ DM §34, 1686.

¹⁵ "*De Natura Mentis et Corporis*," 1683-1685/86?; A VI.iv.1490.

¹⁶ Kulstad, commenting on a similar passage from "*De Affectibus*," "to remember is to believe that one has perceived," (A VI.iv.1413), says that "clearly this involves a second-level mental activity, namely a belief about one's perception. And this would seem to be a matter of reflection," (Kulstad, 38).

¹⁷ PNG §4, 1714.

¹⁸ M §26, 1714.

¹⁹ See M §§29-30.

²⁰ It may be thought that I am taking some license in saying this passage refers to the *distinctness* of perceptions, but this passage is parallel to PNG §4 (M7 above), which does refer to the distinctness of perceptions.

²¹ There is one earlier text that doesn't fit neatly into any of these categories. Leibniz says that "to remember is to believe that one has perceived" (*De Affectibus*, 1679 ; A VI.iv.1413). This text is clearly of a piece with the theory that memory requires self-knowledge, but it is much weaker than the texts adduced in that section. Notice that this definition allows for memories that are strictly false. It seems to be enough that I *believe* that I once perceived the Battle of Waterloo (say from Wellington's perspective) for that to count as a *memory* of the Battle of Waterloo, even if I was not in fact present for the Battle of Waterloo.

But this is an extreme case. Surely we need to allow some ground for *mis*-rememberings. For example, suppose that I remember some of the details of an occasion, but not all of them. I remember having an engaging conversation about American politics while on a walk in Cambridge. The fact of the matter is that we had this conversation while in a pub—I merely conflated two experiences. This, it seems, is still a memory of my having an engaging conversation about politics, even though wrong on some of the details. Stating it in terms of belief provides room for error. In several of his other definitions, Leibniz says that memory is the recurrence of a perception and the *knowledge* that we've had it before, which seems too strong. Leibniz does say, however, that "we can be deceived by a memory across an interval—one often experiences this and one can conceive of a natural cause of such an error" (A VI.vi.238 / NE

238). The nature of the error theory is an interesting problem for Leibniz's theory of memory that I won't discuss further here.

²² “[...] *que c'est Sensation lorsqu'on s'aperçoit d'un objet externe, que la Réminiscence en est la répétition sans que l'objet revienne, mais quand on sçait qu'on l'a eue, c'est souvenir*” (A VI.vi.161 / NE 161). Remnant and Bennett say in a footnote that *réminiscence* is the recurrence of the *perception* that is involved in sensation, without the recurrence of the object. However, as I have noted in the text above, it seems to me that the better reading is that *réminiscence* is the recurrence of the *sensation* without the return of the object of sensation. On the Remnant and Bennett reading *réminiscence* will not necessarily be conscious. But, on my reading, since sensation is here described as an *awareness* of the outer object, *réminiscence* will also be conscious.

²³ A VI.vi.77 / NE 77; immediately following this passage, Leibniz equates “recollection” with *souvenir*.

²⁴ I follow Robert McRae on this point. Cf. McRae, 45f.

²⁵ Cf. G IV.551-552 / Woolhouse/Francks, 106.

²⁶ G II.57 / Mason, 64.

²⁷ A VI.vi.140 / NE 140.

²⁸ For example. Alison Simmons denies that sensation and consciousness go together, citing passages like NE 188, where Leibniz refers to an uneasiness that we “sense without taking cognizance of it,” and NE 55 where Leibniz says that there is “faint sensing” even in a deep sleep. Thus, Simmons says, “insofar as there is sensing going on, there is distinct perception going on, and yet there seems to be no consciousness” (Simmons, 56). Kulstad, on the other hand, argues that sensation and consciousness go together (as well as reflection, although I will

not take this up here). He argues for this most explicitly in Kulstad, Chapter 1, §D, where he says,

We have already indicated that they [i.e., several parallel passages] reveal significant and perhaps unsuspected similarities between the perception-apperception and perception-sensation contrasts. That is a cautious conclusion and, accordingly, relatively certain. But a markedly more interesting, albeit less certain, conclusion is also suggested by the passages we have considered, namely, that sensation involves just the same event as apperception. More precisely, the thesis is that sensation involves just the same event as apperception with ‘apperception’ taken in the reflective sense, that is, as entailing reflection as part of the apperceptive act. (Kulstad, 36)

I will not attempt to adjudicate this disagreement here, although I’m inclined to agree with Kulstad in saying that sensation and apperception go together, although I deny that apperception is to be explained in terms of reflection.

²⁹ A VI.vi.161 / NE 161.

³⁰ It was actually common in the seventeenth century to divide memory into three different species, although there are important differences in the ways they were divided. Marin Cureau de La Chambre argued for a three-fold division of memory, using the same technical vocabulary as Leibniz (Marin Cureau de La Chambre, *Le Systeme De L'ame* (Paris: Jacques d’Allin, 1665), 259, 292, and 350). Unlike Leibniz, he is willing to grant *souvenir* to animals, but this is consistent with La Chambre’s argument that animals are capable of reason (although only reasoning about particulars). Cf. Marin Cureau de La Chambre, *Traité De La Connoissance Des Animaux* (Paris: P. Ricolet, 1647).

The Cartesians also made use of technical distinctions in their discussions of memory. For example, Louis de La Forge also has a three-fold division of memory, which doesn't correlate quite as well with the divisions I have argued for here:

Corporeal memory: By the term 'corporeal memory' (*mémoire corporelle*) here I understand only a certain facility to re-open which remains in those pores of the brain's ventricles which have already been opened by the spirits and in the fibres through which the spirits passed, whatever the cause which had made the opening. (La Forge, *Oeuvres Philosophiques*, ed. P. Clair (Paris: Presses Universitaires de France, 1974), 280f. / La Forge *Treatise on the Human Mind*, trans. D.M. Clark (Boston: Kluwer, 1997), 178)

Remembering: [I]n order to remember (*réminiscence*) it is not enough simply to perceive a species which comes back again, if one does not also know that this is a re-appearance and that it is not the first time one has had this thought. (La Forge *Oeuvres*, 284 / La Forge *Treatise*, 182)

Spiritual Memory: [J]ust as the pores of the brain when they have once been opened have a greater facility to re-open a second time, likewise [for spiritual memory (*mémoire spirituelle*)] when the mind has once had an idea, there remains in it a greater facility to conceive the same idea again. (La Forge *Oeuvres*, 290 / La Forge *Treatise*, 186)

La Forge later also calls this form of memory "intellectual memory" (*mémoire intellectuelle*) (La Forge *Oeuvres*, 291 / La Forge *Treatise*, 187).

Summarizing the three, La Forge says:

Apart from these two faculties, namely corporeal memory, which stores the traces of species which were imprinted on the gland and the spirits, and remembering, which is conscious of their re-appearance, it is very probable that the mind also has a spiritual

memory, not simply to store the traces of ideas which it had once perceived but to provide an occasion for the mind [...] to recognize if the thought which occupies it, either voluntarily or otherwise, is a novel object or if it knew it before. (La Forge *Oeuvres*, 290 / La Forge *Treatise*, 186)

There are important differences between Leibniz's and La Forge's distinctions, in that corporeal memory is for La Forge *only* corporeal and in that remembering for La Forge requires an act of the intellect and thus would not be attributed by him to animals. But the consciousness condition on *réminiscence*, I have argued, does not require a separate act of reflection for Leibniz, and thus he freely attributes it to animals, preserving *souvenir* for rational substances alone. Leibniz would reject the Cartesian distinction between corporeal and intellectual memory, but he does preserve a sense in which some memories require reflection and others do not.

For further discussion of Leibniz's distinctions in kinds of memory, see Naert, 51 ff. Naert argues that Leibniz divides memory into intellectual memory and corporeal memory, which would correspond to what I've here called *souvenir* and *reminiscence*. She compares these with Descartes' distinction between intellectual and corporeal memory, although for the reasons I have just stated I don't believe these distinctions will fully correspond to one another.

³¹ A VI.vi.238 / NE 238.

³² Gennaro, 356f.

³³ PNG §4.

³⁴ PNG §13. Cf. A VI.vi.239 / NE 239: "An immaterial being or spirit cannot 'be stripped of all' perception of its past experience. It retains impressions of everything which has previously happened to it, and it even has presentiments of everything which will happen to it; but these

states of mind are mostly too minute to be distinguishable and for one to be aware of them, although they may perhaps grow some day.”

³⁵ As Leibniz says in PNG §13, “[I]t is well to make a distinction between perception, which is the inner state of the monad representing external things, and *apperception*, which is consciousness or the reflective knowledge of this inner state itself and *which is not given to all souls or to any soul all the time*” (emphasis added).

³⁶ A VI.vi.238 / NE 238.

³⁷ “[C]onscienciosité ou le sentiment du moy prouve une identité morale ou personnelle” (A VI.vi.236).

³⁸ As one anonymous reviewer pointed out, the *immediacy* of the memory [*souvenir*] might be thought to preclude reflective self-knowledge. But the context of Leibniz’s remarks here shows that reflective self-knowledge is in fact necessary to this form of memory. In response to Locke’s account of personal identity, Leibniz argues for a distinction between “real, physical identity” and “moral identity *which is apparent to us ourselves*” (NE 236, emphasis added). The moral identity, “which is apparent to the person concerned—one who senses himself to be the same—presupposes a real identity obtaining through each subsequent transition [*passage prochain*] accompanied by reflection, or by the sense of *I*; because an intimate and immediate perception cannot naturally deceive [*tromper naturellement*]” (NE 236, translation revised). Further, he claims, “to discover one’s own moral identity unaided, it is sufficient that between one state and a neighboring (or just a nearby) one there be a mediating bond of consciousness.” It is *this* consciousness, which requires self-knowledge, to which Leibniz is appealing when he refers to an “immediate memory” that “cannot naturally deceive [*tromper naturellement*].” If self-consciousness were absent in such a perception of one’s prior states, then the memory would not

provide the evidence necessary to prove moral identity. I will say more in section 4 about what I take the relation of consciousness and “immediate memory” to be.

³⁹ C 491 and 495.

⁴⁰ “*Cognitio est sensio cum repraesentatione seu idea: continet omnes tres operationes.*

Memoria est repetita cognitio orta ex priore.

Experientia est memoria multa similium.” (C 491)

Note, this last definition echoes Aristotle: “[F]rom memory experience is produced in men; for the several memories of the same thing produce finally the capacity for a single experience,” *Metaphysica*, Book A, §1, 980b (Aristotle, *The Basic Works of Aristotle*, ed. Richard McKeon (New York: Random House, 1941), 689).

⁴¹ “*Conscientia est reflexio in actionem, seu memoria actionis nostrae, ita ut cogitemus, nostram esse. Involvit hoc ipsam substantiam veram seu tò ego*” (C 495).

⁴² I discuss the distinctness of memories in Section Five below.

⁴³ Cf. PG 352.

⁴⁴ Note that this argument may not apply to memories of perceptions that are temporally distant from the memory. There may be distinct memories that arise as a result of the repetition of indistinct lower-order perceptions (cf. M §27). Thus, one might have a (distinct) memory of perceptions that themselves were never sufficiently distinct to be conscious perceptions, and so in these cases the distinctness of memories would not be parallel to the distinctness of the original perceptions. But, since consciousness is thought to be a function of “present or immediate” memories, this additive function would not apply.

⁴⁵ A couple of notes on the “*Table de Définitions*” may be in order here. I said above that this interpretation is somewhat speculative, and, indeed, I think if it were to rest on this text alone it

would have some problems. Even though this is a later text, it doesn't include many of Leibniz's most frequent formulas for perception, sensation, and consciousness. It is not clear whether the definition for *cognitio* is thought to apply only to animal souls or to all lower substances (depending on whether *sensio* is thought to be construed broadly, to include *all* perceptions, or whether it is to be construed narrowly as sensation is defined in the *Monadology*, for example). The answer to this question will help determine the extension of *memoria*.

Further, under the heading of "*Accidentia Sensitiva*," Leibniz includes definitions that would apply only to humans. For example, Leibniz defines *observare* as "*percipere cum reflexione*" and he defines *attentio* as "*cogitatio cum desiderio cognoscendi*," *cogitans* previously being defined as involving reflection (cf. C 493, 438).

The text itself, Couturat tells us, is in the hand of Leibniz's secretary of 1702-04, Johann Friedrich Hodann, presumably copying and completing the project that Leibniz had begun long before. But there are corrections in the table of definitions in Leibniz's hand, so we may presume with some confidence that Leibniz looked it over and approved of it.

But perhaps the biggest interpretive problem is in determining whether *experientia* is coextensive with *apperception* as I've suggested. If, for example, *cognitio* is thought to extend to all substances and not simply animal souls, then it seems possible for lower substances to have *experientia*. It may be that *experientia* refers merely to the connectedness of perceptions in a substance, providing a unity to the series of perceptions over time. If so, then the argument I have sketched in the body of the paper will not go through.

⁴⁶ A VI.vi.238 / NE 238.

⁴⁷ C 495.

⁴⁸ “*Cette continuation et liaison de perceptions fait le même individu réellement, mais les apperceptions (c’est à dire lorsqu’on s’apperçoit des sentimens passés) prouvent encor une identité morale, et font paroistre l’identité réelle*” (A VI.vi.239 / NE 239). N.B. the use of *apperception* in this passage, which suggests that the distinction between *conscience* and *apperception* is not a strong one.

⁴⁹ See my paper, “The Principle of Continuity and Leibniz’s Theory of Consciousness.”

⁵⁰ PG 351.

⁵¹ Letter to Varignon, 1702, in *New Essays Concerning Human Understanding*, trans. A.G. Langley, 2nd ed. (New York, Macmillan, 1896), 712.

⁵² PG 352.

⁵³ As Leibniz says in a letter to Varignon (2 Feb. 1702),

Although it is not at all rigorously true that rest is a kind of motion or that equality is a kind of inequality, any more than it is true that a circle is a kind of regular polygon, it can be said, nevertheless, that rest, equality, and the circle terminate the motions, the inequalities, and the regular polygons which arrive at them by a continuous change and vanish in them. (GM IV, 106 / L 546)

⁵⁴ “*Conscientia est nostrarum actionum memoria.*” (“*De Conscientia Memoriaque*”, 1683-1685?, A VI.iv.1473)

⁵⁵ “*Conscientia se habet ad praesentia ut memoria ad praeterita; seu conscientia est memoria*” (A VI.iv.1473, note 13).

⁵⁶ To be more precise, memory is a function of the distinctness of perceptions *prior* to a given state. It is certainly possible, given Leibniz’s system, that there be distinct perceptions of what is

yet to come. These, I suppose, would count as instances of trans-temporal distinctness, but forward-looking. Call this “prescience,” perhaps (cf. A VI.vi.51, 161 / NE 51, 161).

⁵⁷ A VI.vi.54 / NE 54.

⁵⁸ M §§26-27.

⁵⁹ I would like to thank Michael Della Rocca and Robert Adams for several helpful discussions on the subject of this paper. I completed this paper during a summer of research support from the National Endowment for the Humanities, and I am thankful to the NEH for its support.