

Sellars on Hume and Kant on Representing Complexes

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In his graduate-seminar lectures on Kant—published as *Kant and Pre-Kantian Themes* (Sellars 2002)—Wilfrid Sellars argues that because Hume cannot distinguish between a vivacious idea and an idea of something vivacious he cannot account for the human ability to represent temporally complex states of affairs. The first section of this paper aims to show that this argument is not properly aimed at the historical Hume who can, on a proper reading, distinguish these kinds of representations. This is not, however, Sellars' only argument for this conclusion. The next section of this paper continues with a discussion of an argument that Sellars presents on Kant's behalf in *Science and Metaphysics*, and its key Kantian premise that, *pace* Hume, only *conceptual* representations can represent any complex states of affairs as such. The conclusion of this discussion is that Sellars does indeed present compelling reasons for rejecting a Humean account, reasons centred on the *ambiguity* of the associative structure of mental representation (which Sellars subsequently replaces with *inferential* structure). The paper concludes with an examination of the sense in which non-conceptual representations—such as those that Hume considers—represent and the role that these play in conceptual representation for both Sellars and Kant.

Sellars on Hume

In the course of his lectures on Kant's accounts of space and time Sellars asks us to consider how Hume might account for the temporally complex experience of a person raising his hand.¹ How is it, on Hume's account, that we represent the sequence of events that together comprise a hand being raised? To begin with, we can surely say that this account will involve perceptions (impressions and ideas) of a person with his hand in various *stages* of being raised.

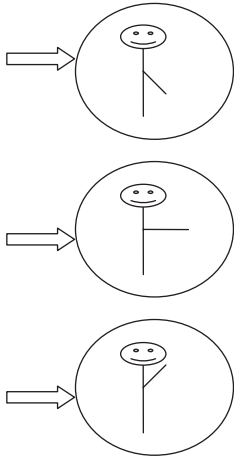


Figure 1

The arrows here indicate that what appears inside the bubbles are what is represented by some perception. So, what we have here are three representations, each of a person with his hand in a different stage of being raised. Of course, none of *these*, Sellers points out, is the representation of *a hand being raised*. The top perception is of a person with his hand down; the middle perception is of a person with his hand parallel to the ground; the last is of a person with his hand raised. None, *by itself*, is a representation of a hand being raised. This much should be obvious.

As Sellers points out, the first step in Hume's account of temporality will be to notice that these representations themselves occur in a temporal sequence.

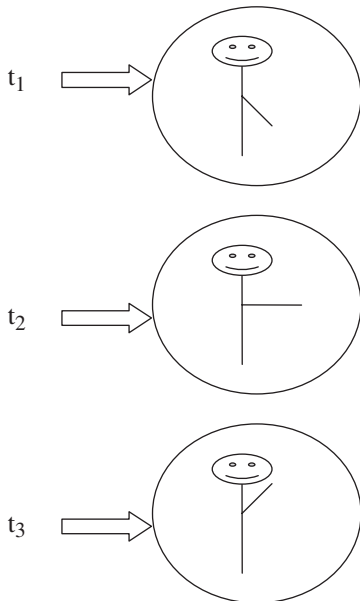


Figure 2

Of course, a temporal sequence of representations is not yet a representation of a temporal sequence. As in the case above, we do not here have a representation of a hand being raised. What we have instead, again, is a representation of a lowered hand, followed by a representation of a hand parallel to the ground and a representation of a raised hand. Certainly, the fact that these representations occur in a temporal sequence does nothing to add to any of them *individually* the content 'a hand being raised'; they are each still only representations of hands in various positions (which may, or may not, be part of a hand raising; none of them is a representation of a hand *being raised*). Furthermore, the *collection* of ideas, now themselves explicitly placed in a temporal sequence, also does not represent a hand being raised. Hume would certainly agree that there are many sequences of representations that run through the human mind, not every one of which is a representation of a sequence of events. It follows, then, that occurring in such sequence is not sufficient for representing a temporal complex, although it *might* be necessary for this.² A sequence of representations, by itself, is not yet a representation of a sequence.

The problem here is that these representations remain *independent* of one another. What we need is not just a representation of each of the stages of a hand-raising, but also a representation that, in some sense, *includes* these stages, and represents them as *parts* of a *whole*, moments in an event of hand-raising. We will not only need a representation of each stage, but also a representation of the relations that they bear to one another. To accomplish this, we will need some account of how these earlier perceptions are *retained* and placed alongside the later ones. We need the earlier representations to be *remembered* later, so that they can be *combined* with the later ones into a complex representation of the complex state of affairs that is a person raising his hand.³ As Sellars rightly points out, 'Hume speaks in terms of vividness here' (Sellars 2002: 111). Here is Hume, in the context of distinguishing the memory from the imagination, on the relation of force and vivacity to memory.

The more recent this memory is, the clearer is the idea; and when after a long interval he wou'd return to the contemplation of his object, he always finds its idea to be much decay'd, if not wholly obliterated. We are frequently in doubt concerning the ideas of the memory, as they become weak and feeble; and are at a loss to determine whether any image proceeds from the fancy or memory, when it is not drawn in such lively colours as distinguish that latter faculty. (T 1.3.5.5; SBN 628)⁴

A memory is an idea, and as such, is a copy of an impression. As time passes, our memories lose more and more of the vivacity that they have at the time of their formation. They become weak and feeble. This is Hume's account of how past impressions are available to the mind for combination with present impressions, and of how the two are distinguished. An impression is retained in the form of an idea; this idea persists, even as the impression is lost, and is

available at later times, with a loss of force and vivacity, for combination with other ideas and impressions.

What we need now is Hume's account of what the nature of this *combination* is, of the way the weak and feeble ideas of memory are combined with the forceful and vivacious impressions of the present in order to form a representation of a temporal sequence. Sellars offers us two pictures of this combination. The first looks like this.

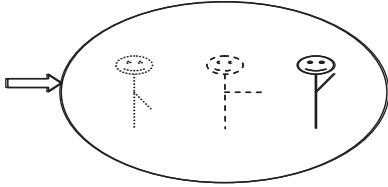


Figure 3 (Sellars 2002: 111)

Now, the content of an idea that would be pictured like *this* would be a faint *person* with his hand down *standing next to* a slightly less faint person with his hand parallel to the ground *standing next to* a vivid person with his hand raised. It is clear from the context that Sellars does not mean to accuse Hume of representing temporal sequences by representing temporal parts *as* spatial parts. Rather, what Sellars sets out to picture here is three representations, *in some way combined with one another* into a whole in which all three representations appear. Let us represent this as follows.

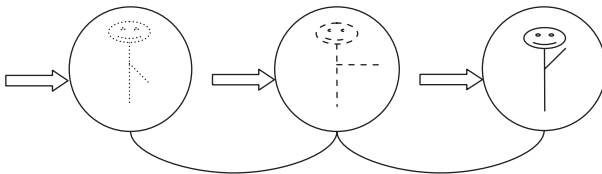


Figure 4

Here we have three representations combined in some way, we do not yet know how. At this point in our story all we know is that it Hume's hope that there is some way of combining representations so as to make the subsequent complex representation a representation of a complex. Still, though, in Figure 4, the ambiguity between a faint idea of a person, and an idea of a faint person remains. As Sellars sees it, this is entirely appropriate.

Consider Sellars' *second* picture of how Hume would attempt to represent a temporal sequence, in which, again, Sellars has Hume combine the constituent representations spatially.

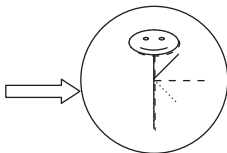


Figure 5 (Sellars 2002: 112)

What we have here is a complex representation in which the various components *overlay* one another, so that, as Sellars points out, it becomes unclear whether this representation is of the motion of an arm moving upwards, or of a person with three arms each more faded than the next. What is important here, however, is not the confusion concerning the number of arms represented; this can be clarified, at least temporarily, by the convention employed above for picturing unknown relations. Rather what is of interest is the ambiguity that Sellars again attributes to Hume between a faded representation and a representation of something faded. It is because of *this* ambiguity that at this point Sellars abandons Hume's attempt to account for a temporal sequence altogether.

Now this is what posed the problem and, as I said, Hume was really unable to account for it. He really didn't have any account to give. (Sellars 2002: 113)

Sellars' thought is that Hume simply has no resources here, and that this criticism is clearly decisive. If Hume's account does not distinguish a representation of a faded hand from a faded representation of a hand, then—given that it was the force and vivacity of a perception that was supposed to account for its placement in a representation of a temporal sequence—Hume's account is hopeless. Force and vivacity simply cannot play both of the roles that they need to as properties of both of *representings* and *representeds*. Their doing so introduces an ambiguity that is fatal to Hume's system.

Of course, this raises the question *for us* of whether Hume really does intend force and vivacity to play both these roles, and whether it is possible for him to avoid this ambiguity. What I will suggest in what follows is that this was never Hume's intention, and there is no reason to think that his account allows for this ambiguity at all.

There are, then, two points in Sellars' construal of Hume that we must keep an eye on in our own discussion of Hume. The first point concerns the structure that complex representations must have to be representations of complex states of affairs as complex states. As of yet, we only have a promissory note issued on Hume's behalf to the effect that there must be *some* structure that does this work. The second point concerns the ambiguity between a forceful and vivacious idea and the idea of something forceful and vivacious. My plan for the remainder of this section is to pick up the latter topic first, as its resolution will provide some insight into the resolution of the former.

The most prominent feature of Sellars' construal of Hume's account is that the fatal ambiguity that crops up there is a direct byproduct of Sellars' taking vivacity to be part of what we might call the *pictorial content* of an idea. Hume is an imagist. He argues that a mental entity represents what it represents in virtue of its being caused by what it represents and its *resembling* it.⁵ So, for instance, my driver's license photo is a photo *of me* in virtue of the fact that there is a causal chain leading from me to the photo, *and* that the photo resembles me. It is this latter condition that concerns us here. What it requires is that the photo have

certain features in common with me. The colour of the hair in the photo should be the same as the colour of my hair, the relation of the eyes to the nose in the photo should be the same as the relation of my nose to my eyes, etc.

These features are what I call the *pictorial content* of the photo; Hume sometimes calls these the 'circumstances' of an idea.

When I shut my eyes and think of my chamber, the ideas I form are exact representations of the impressions I felt; nor is there any circumstance of the one, which is not to be found in the other. (T 1.1.1.3; SBN 2)

What is particularly noteworthy about the way that Hume treats these features of ideas is that he does *not* include among them the degree of force and vivacity of ideas and impressions. Earlier in this paragraph he notices,

... the great resemblance betwixt our impressions and ideas in every other particular, except their degree of force and vivacity. (T 1.1.1.3; SBN 2)

Ideas resemble impressions in all their circumstances, but do not resemble impressions in their degree of force and vivacity. Therefore, force and vivacity must not be among the circumstances of an impression or idea. If, however, they are not among the circumstances of an idea, then they are not part of the *pictorial content* of the idea. They are not features in virtue of which an idea represents what it does. In fact, this *has to be* a thesis that Hume endorses. Notice, for instance, the following series of claims:

Our ideas are copy'd from our impressions, and represent them in all their parts. When you wou'd any way vary the idea of a particular object, you can only encrease or diminish its force and vivacity. If you make any other change on it, it represents a difference object or impression. The case is the same as in colours. A particular shade of any colour may acquire a new degree of liveliness or brightness without any other variation. But when you produce any other variation, 'tis no longer the same shade or colour. (T 1.3.7.5; SBN 96)

Pace Sellars, Hume quite clearly believes that altering the force and vivacity of an idea *does not alter its content*, does not alter what that idea is an idea of. As Hume also clearly thinks that altering any *circumstance* of an idea does alter what that idea is an idea of, vivacity cannot be a circumstance of an idea.⁶

What, then, is vivacity if not part of the pictorial content of an idea? Well, if we can be allowed for a moment to shift away from vivacity to force, an answer becomes apparent. The reason for this shift is because it is much less tempting to think of the *force* of an idea as part of its pictorial content. Rather, force would seem to be a matter of the *way* in which an idea with a particular pictorial content *acts* in the mind. (Hume calls this 'the *manner* of our conceiving them' [T 1.3.7.4; SBN 96].) An idea is forceful just in case it cannot be shook, it *forces* itself on us, we cannot dislodge the idea from the theatre of our mind. A song stuck in your head, a haunting image, or a present visual sensation would all be paradigm

examples of forceful ideas. Similarly, then, an idea is vivacious just in case it *jumps out at you*, it *catches your attention*, etc. That is, we can give both force and vivacity *functional*, rather than *imagistic*, readings. Force and vivacity are matters of the *behaviours* of ideas, not their content.⁷

By making this move on Hume's behalf, which he seems pretty clearly committed to anyway, we can now redraw our previous Figure 4 as follows.

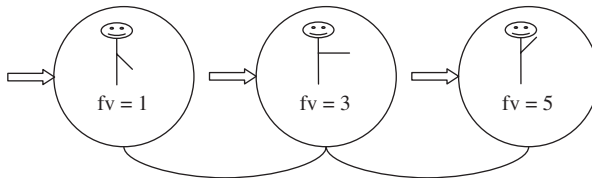


Figure 6

Here it should be clear that the represented object of each representing is not in any sense 'faded'. The representing is either feeble and weak or forceful and vivacious, but this fact is now appropriately represented in our picture as an assignment of a degree of force and vivacity to each representing. The representing of the hand in the lowered position is the weakest, the representing of the hand parallel to the ground is slightly less weak, and the representing of the hand in the raised position is the most forceful and vivacious of all. The ambiguity that infected Sellars' construal of Hume has been eliminated.

Furthermore, taking into account Hume's contention that a memory becomes less and less forceful and vivacious the more time passes between its present occurrence in the mind and its original formation, we can now see one line of reasoning that Hume could pursue vis-à-vis the structure of complex ideas that represent temporally complex states of affairs. The first step is to replace our Figure 6 with a new picture in which the coordination of degree of force and vivacity and the time at which an original impression is had has already been performed. That is, Hume can leverage coordination of force and vivacity with time of first appearance into a mental analogue of carbon-dating.⁸ Thus we can picture the representation of a temporal sequence in Hume as follows.

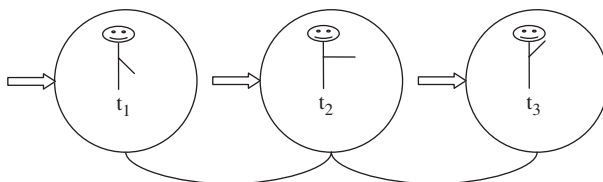


Figure 7

Here each representation comes with a time-stamp, reflected in its degree of force and vivacity. Of course, this correspondence of degree of force and vivacity and

the time of formation of an idea is a vast oversimplification. Time of formation is only one of many things that affect the degree of force and vivacity of an idea according to Hume, and for the above procedure to really work, we would have to ignore all the others. Suppose we could do this, however. What would Hume's account of the representation of a temporal sequence be then, and how would it fare?

Well, we still have not had much to say about the connecting lines that we have imported into this figure on Hume's behalf, about, that is, the structure into which representations are put in order to make them into representations of a temporal sequence. What I want to suggest now, however, is that this structure has become less important. Remember that the concern with structure earlier arose from a need to distinguish having a series of representations from having a representation of a series. Now that each representing in the series of representations is a representing of an event *at a time*, it seems more plausible to suppose that a series of *such* representings might very well, for all we have said, constitute a representation of a series. Such a series would represent an arm down at t_1 , an arm parallel to the ground at t_2 , and an arm raised at t_3 . Arguably, one cannot represent any of these *particular* times without *also*, at least implicitly, relating them to one another,⁹ and so if Hume were right that we do the former on his account, we must also do the latter. Thus, the nature of the connections between these ideas as they occur *in our minds* (as, say, temporally successive, or even merely associated) would not matter as much as their *conceptual* relations to one another vis-à-vis their time stamps.¹⁰

While this account of our capacity to represent temporal sequences may ultimately fail, and while it does not account for our ability to represent other kinds of complex states of affairs, the question with which we are concerned is: does it fail for reasons that Sellars has on offer, either in the lectures we have been examining, or elsewhere? What I want to suggest is that there is no objection to this account in the lectures. As we have seen, Sellars thinks that Hume cannot even get this far, that he has nothing to say on the matter at all. The inadequacy of Hume's account, however, cannot be dismissed so easily. Rather it is due, firstly, to the fact that Hume's notions of force and vivacity are simply overburdened in his system, and so cannot be used to time-stamp impressions and ideas accurately. For instance, ideas can be *reinvigorated* by present impressions, giving them higher degrees of force and vivacity than they would have based solely on the time at which their original impression was formed. Furthermore, since a belief, on Hume's account, is a particularly forceful and vivacious idea, presumably evidence counting *against* a belief would weaken and enfeeble it, giving it *less* force and vivacity than would be appropriate to its time stamp. And so on. Hume has options available for dealing with such cases, but they are at least *prima facie* quite troubling.¹¹

Secondly, Sellars offers yet another reason for rejecting Hume's account, not in the lectures we have been considering, but in *Science and Metaphysics*. There Sellars argues, on behalf of Kant, that 'what the representations of sheer receptivity are of is in no sense complex' (Sellars 1967: 8), and that this is because,

again following Kant, no *non-conceptual* representation can be of a complex. Now, it is unclear at this stage in our investigation just what being 'conceptual' as opposed to 'non-conceptual' entails, and which of these categories the representations for which we have seen Hume account properly fall under. The former topic, along with a defence of the above claims, will be the topic of the next section. We will return to the latter after that.¹²

Science and Metaphysics

We have now completed the first of the three tasks that we listed at the outset. We have seen that a certain criticism that Sellars makes of Hume—that Hume is unable to distinguish a forceful and vivacious perception from an impression of something forceful and vivacious—is unfounded. We have also, however, been able to glimpse a different criticism available to Sellars concerning the *structure* into which the elements of a complex representation are put to form representations of complex states of affairs as such. The second task on our list was to pursue this criticism, and as we have seen this means delving into the reasons behind the Sellarsian/Kantian claim that it is only *conceptual* representation that is capable of representing complex states of affairs as such.

Perhaps the best way to see why Sellars and Kant hold these views will be to see how they think we *do* represent complexes, and then to notice what the conceptual element in this account is, and what happens if we remove or replace it. To begin this task, we need to make a few distinctions. Firstly, Sellars' contention on behalf of Kant that 'what the representations of sheer receptivity are *of* is in no sense complex' can be taken in at least two ways.

1. The representations of sheer receptivity represent something, and this thing is simple.
2. The representations of sheer receptivity represent something, but do not represent it *as* complex (although what they represent may, in fact, *be* complex).

The way that Sellars puts his contention would make it seem that he intends the first of these: that he is saying something about *that which* the representations of sheer receptivity represent. This, however, seems clearly to be a mistake. It is part of Sellars' project in the first chapter of *Science and Metaphysics*, from which this quotation is drawn, to show that what is represented by receptivity is *the same thing* as what is represented by the spontaneous understanding.¹³ Both, in their own particular way, represent the spatio-temporal world, which is plenty complex. Rather, the point that Sellars makes here, and which we will soon see defended, is that the representations of sheer receptivity do not represent the spatio-temporal world *as* complex. Thus we find him a bit further on writing that

'nothing represented by outer sense as such is a spatial complex' (Sellars 1967: 8). It might be that what is represented by outer sense *is* a spatial complex, but it is not represented *as such* by *sense*, by receptivity.

So, Sellars thinks that what is represented by sheer receptivity is not represented *as* complex; receptivity cannot represent complex states of affairs as such. He does, however, think that what is represented by the spontaneous understanding is represented as complex, that it represents complex states of affairs as such.¹⁴ Our task now is to investigate how he thinks it does this. The first step on the way to doing this is to notice with Kant that, 'the cognition of every, at least human, understanding is cognition through concepts' (Kant 1998: A68/B93). That is, when Sellars contrasts the representations of sheer receptivity with those of the spontaneous understanding, he is contrasting, following Kant, *conceptual* with *non-conceptual* representations. It is the former with which we will presently concern ourselves.

Lucky for us then that Sellars tells us just where to find his answer to the question of how conceptual representations represent complex states of affairs as such, and of how these differ from non-conceptual representations of the same states of affairs (not as such).

If it is also true, as Wittgenstein held (*Tractatus*, 3.1432) that conceptual representations of relational states of affairs are to be construed as complexes of conceptual representations of their terms, the question obviously arises 'What is the connection between the counterpart relations which bind conceptual representations of terms into conceptual representations of complex states of affairs, thus the conceptual representation that s_1 adjoins s_2 , and the counterpart relation which binds non-conceptual representations into non-conceptual representations of relational wholes, thus the impression of a green square adjoining a red square.' I shall have something to say on this topic in Chapter IV. (Sellars 1967: 26)

Notice that what the conceptual representations represent are complex states of affairs, while what the non-conceptual representations represent are relational wholes. Notice also that already we see that the *way* that conceptual representations operate in representing complex states of affairs is by standing in a certain kind of *relation* to one another. These will both be important points, for our further discussion. For now, though, we must follow our lead to Chapter IV.

The relevant place to pick up this thread is the following long paragraph in which Sellars describes how he thinks we conceptually represent complex states of affairs as such.

Now what Wittgenstein established was that whether one does it perspicuously or not, one can say of two objects that they stand in a certain relation by placing the corresponding referring expressions in a counterpart relation. Thus we say

a is larger than b

or

a_b

in either case what we have done is form an expression which, from the standpoint of its semantical functioning, is a dyadic configuration of the names ' a ' and ' b '; it is, in other words, an

$$R^*[\cdot a \cdot, \cdot b \cdot]$$

where this is a common noun which applies to items consisting of an $\cdot a \cdot$ and a $\cdot b \cdot$ related in a way which does the job, in the language to which it belongs, which is done in our subject-predicate language by concatenating these names with a predicate. (Sellars 1967: 109)

Here Sellars picks up just where he left off in Chapter 1 with the point he takes Wittgenstein to have proved, namely, that we represent complex states of affairs as such by placing counterparts of the constituents of those states of affairs into relations that are the counterparts of the relations to which those constituents stand. So, for instance, consider the following complex state of affairs, in which the figure on the left is larger than the figure on the right.

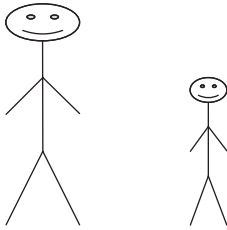


Figure 8

Sellars' suggestion is that the way we represent this state of affairs is by placing the names a and b , which respectively refer to the figure on the right and the figure on the left, into a certain relation *with each other*, a relation that is the counterpart in our language of the relation in which the figures stand to one another. In our language, the counterpart relation in which we would place the names a and b would be placing them on either side of the words 'is larger than' (or a suitable functional analogue of 'is larger than').

This parenthetical remark brings us to a crucial point. It will, no doubt, have been noticed that in the above quotation the names a and b appear dot-quoted, and this fact requires an explanation. Dot-quotes, as Sellars uses them, provide a way to mention bits of language *functionally classified*. So, while "'red'" mentions the English word 'red', ' \cdot red \cdot ' mentions any bit of language, in any language, that plays the role that 'red' does in English. Thus, its scope includes the German 'rot', the Spanish 'rojo', the French 'rouge', etc. When Sellars, then, asserts that

placing an $\cdot a \cdot$ and a $\cdot b \cdot$ in a certain relation R^* represents a and b as standing in a certain relation R , he means that placing *any terms that are functionally equivalent to 'a' and 'b' in relation R^** —or *its functional equivalent*—represents a and b as standing in relation R to one another. We can say, for instance, that John is larger than Judith, or that Johnny is bigger than Judy, etc. so long as each member of the pairs 'John' and 'Johnny', 'Judith' and 'Judy', and 'is larger than' and 'is bigger than' play the same role in the language as one another.

It is important to note here that while Sellars argues that it is in principle possible—and perhaps most perspicuous—to eliminate predicative expressions from a language (because, as he also argues, predicative expressions do not refer), we cannot eliminate the role that such predicative expressions play (properly construed, of course).¹⁵

Let me emphasize that this is not to say that singular statements could in principle, 'consist of referring expressions' in the sense of being a mere list—the crudest possible form of nominalism. It is rather the more subtle point that one says *how* objects are by inscribing or uttering the corresponding referring expressions in a certain manner. (Sellars 1967: 109)

The job of predicates—be these predicative *terms* or predicative *relations*—is to allow us to say '*how* objects are'. That is, it is to allow us to represent *complexes*.¹⁶ Thus, while we could eliminate the sign-design 'is larger than' from our language and continue to represent one thing being larger than another by, for instance, placing the name of the larger thing above the name of the smaller, here that *placement* would be doing certain work in our language. Placing names in *that* relation, rather than the relation in which they are on either side of an 'is larger than', says of the things that one is larger than the other. The importance of this is that it allows us to see that there is a functional role played in our language by 'is larger than's, that is, we can speak of \cdot is larger than \cdot s. What we must turn to now is the nature of this functional role.

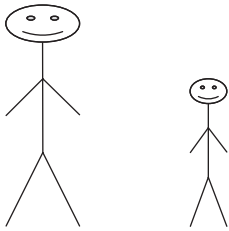
Sellars is quite explicit and clear on what the role is that any linguistic item must play in order to have this kind of function. He believes that this is a broadly *inferential* role (although not every relevant connection between linguistic items is an inference). In fact, Sellars gives a list at the close of the chapter that we have been examining of what kinds of relations constitute inferential roles. These are his well-known language-entry, language-language, and language-exit moves.¹⁷ They are essentially kinds of rules for connecting judgments, sensations, and volitions. Names and predicates are the kinds of linguistic items that license and prohibit such connections. For instance, the proper use of a \cdot lightning now \cdot authorizes the use of a \cdot thunder soon \cdot in virtue of the material implications that connect these two judgments, which implications represent the *relation* of lightning to thunder.

Similarly, Kant is often read as a kind of inferentialist.¹⁸ Considering the concept of a body, for instance, he writes,

Thus the concept of body *serves as a rule* for our cognition of outer appearances by means of the unity of the manifold that is thought through it. However, it can be a rule of intuitions only if it represents the necessary reproduction of the manifold of given intuitions, hence the synthetic unity in the consciousness of them. Thus in the case of the perception of something outside of us the concept of body *makes necessary* the representation of extension, and with it that of impenetrability, of shape, etc. (Kant 1998: A106, my emphasis)

Kant, of course, does not mean that whenever we employ 'body' in a judgment, we must also employ 'impenetrability', 'shape', etc. in further judgments. What he means is that the concept of a body serves as a *rule of inference* according to which if one is committed to something's being a body, then one is thereby also committed to its being impenetrable, to its having a shape, etc. Analogously to Sellars, Kant thinks that placing intuitions into certain inferential relations with one another is how we represent the manifold of intuitions as being a certain *way* (of containing certain necessary relations).

The importance of inference for Sellars and Kant in the current context—determining why they believe only conceptual representations can be of complexes—cannot be underestimated. Consider again the two figures pictured above.



According to Sellars, the way to represent the figure on the left being larger than the figure on the right is to place the names of these two figures into a certain relation with one another; in English we place their names on either side of an *'is larger than'*. Now, it should be clear that these two figures stand in *many* relations to one another other than the left's being larger than the right. They are *next to* one another, they *resemble* one another, etc. What explains, therefore, that placing the names of each of these figures on either side of an *'is larger than'* represents the one as being *larger than* the other, rather than say one's be next to the other, or one's resembling the other? The answer, according to Kant and Sellars, is that it is the specific inferential role that *'is larger than'* plays in English that does so.

That is, one predicate (or name) will be differentiated from others by the inferences it licenses, prohibits, etc. in a language. For example, '*a is larger than b*' and '*b is larger than c*' licenses '*a is larger than c*', but '*a resembles b*' and '*b resembles c*' does not license '*a resembles c*'. Furthermore, *pace* Wittgenstein,

Sellars (and Kant) argue that not only are there *formal* rules of inference, but there are also *material* rules of inference.¹⁹ So, for instance, 'a is to the west of b' licenses 'b is to the east of a', and 'lightning now' licenses 'thunder soon'. It is these material inferences that allow for the individuation of linguistic-functional items. Were terms to have their meaning merely in virtue of the role they played in formal inference, most predicates would be indistinguishable; we would not be able to represent particular complexes *determinately*.

This, it turns out, is the core of the Kantian-Sellarsian critique of Hume. Sellars describes Hume's position vis-à-vis material inference as follows:

Those who take this line claim that 'It is raining, therefore the streets will be wet', when it isn't an enthymematic abridgment of a formally valid argument, is merely the manifestation of a *tendency to expect* to see wet streets when one finds it raining, a tendency which has been hammered into the speaker by past experience. In this latter case it is the manifestation of a process which at best can only *simulate* inference, since it is an habitual transition of the imagination, and as such is not governed by a principle or rule by reference to which it can be characterized as valid or invalid. That Hume dignified the activation of an association with the phrase '*causal inference*' is but a minor flaw, they continue, in an otherwise brilliant analysis. (Sellars 1953: 315)

Sellars here describes the Humean position as one that substitutes *mental associations* for material inferences. Since among the work we have been supposing that material inference does for Sellars is to individuate names and predicates, the question then becomes: can mental association be used to individuate names and predicates?

The answer to this question must be a resounding 'No'. The associations one makes between certain ideas—or linguistic items—in one's mind are notoriously fickle, while the content that is represented by those ideas is, for the most part, fixed. Associating a dog-idea with a cat-idea does is not the same as representing dogs and cats as being of the same kind. One may simply be inclined to think of a dog whenever one thinks of a cat, while remaining perfectly clear that dogs and cats are entirely different kinds of animals. Furthermore, if one did take dogs and cats to be the same kind of thing, one would be *wrong* to do so. There is a dimension of normativity in our concepts for which association simply cannot account.²⁰

If Sellars is right that we represent complex states of affairs by placing names into relations with one another that are the counterparts of the relations in which the referents of these names stand (a big if), then it is certainly more plausible to think that these counterpart relations will be *inferential* rather than *associative*. There are only so many associations one can make, or even be disposed to make, and these are clearly inadequate for representing all the many relations that things can stand in to one another. There could be, on the other hand, exactly as many inferential relations, especially when one includes material-inferential

relations, as there could be relations among objects. In fact, the whole *purpose* of placing names into inferential relations, on Sellars' view, is to create an adequate picture or map of the world (the sum total of complex states of affairs), and so on this view, we strive to accomplish just this kind of one-to-one correspondence of inferential relations to complex states of affairs.

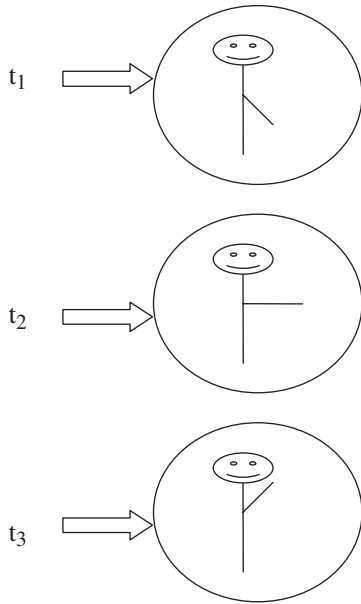
For this picture-theory to work, it is essential that the complex representations involved be *unambiguous* pictures of their objects. *Associating* a mental representation of dog with a mental representation of a cat is not sufficient for producing an unambiguous representation of, for instance, a dog *next to* a cat. The normativity of inferential relations helps here because with it we can place these representations (of the dog and of the cat) in more determinate relations with one another. Instead of merely associating these two mental items, we can place them into relation with, say, a *third* mental item, an *· is next to ·*, which signals their places in an unambiguous system of inference. It is the normative aspect of inference which takes us beyond what we *associate* a mental representation with, to what we are, say, *committed to*, or *forbidden from*, or *permitted to*, given that we have certain mental representations. These further resources are what provide for the disambiguation of mental representations.

This, then, is ultimately the source of the Kantian-Sellarsian critique of Hume's account of the representation of complexes (including, but not limited to, spatial and temporal complexes). To represent a complex state of affairs requires a set of representings that can themselves be *determinately* classified as having that particular state of affairs as their content. Hume's account is inadequate because the only means by which he can classify such representings is by their associations, and associations are themselves inadequate to this task. For Sellars, a complex of representings, such as *a_b*, can come to represent a complex state of affairs only if the former complex stands in inferential relations with other complexes, which relations give it a determinate content. For Hume, on the other hand, the only relations that complexes of representings can stand in are relations of association, and relations of association are not sufficient for giving these complexes of representing any determinate content.

It may be here objected that this critique of Hume falls short insofar as it takes for granted that the only way that Hume has to fix the content of a complex of representings is via an analogue of placing those representings in material inferential relations. This, however, is a thesis to which Hume would object. It is not, Hume would contend, by associating representings with one another that the subsequent representing has the content that it does. Rather, it has this content because the complex idea formed by association itself *resembles* its content. We have, the objection goes, been giving short shrift to Hume's actual theory of content.

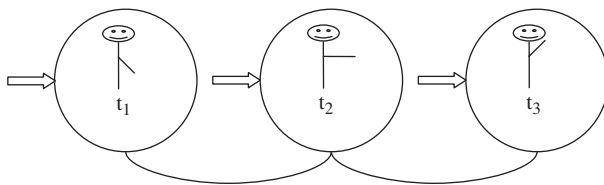
The response to this objection, however, has already been given earlier in our discussion of the representation of a temporal sequence. Taken strictly, this suggestion would entail that we represent a temporal sequence by placing representations into temporal sequences. What we saw earlier, however, is that

nothing in such a sequence of representings would itself represent a temporal sequence.



That is, none of the ideas had at t_1 , t_2 , or t_3 would themselves represent anything complex, and if it is the whole of the sequence of representings that is to represent the whole of a sequence of events, again the burden falls on association to be the tie that binds this sequence of representings together.

We can now see the sense in which Sellars' criticism of Hume in his lectures is appropriate. While it is not the case, on the reading of Hume that we have presented, that Hume confuses a vivacious idea for an idea of something vivacious, it is still the case that Hume runs into a vicious ambiguity. It is that between the representation of one complex, and the representation of an entirely different one. The ties that bind together representations into a picture like this,



are not enough to distinguish, for instance, a representation of person raising his hand from a representation of three people each with their hands in different positions. These ties are mental associations, and, appropriately, as in Figure 2, there is no representation of the entirety of the temporal sequence.

σ - and τ -Manifolds: the Representations of Sheer Receptivity

Despite the importance that Sellars and Kant both place on the conceptual aspects of representation, both also maintain that there is a sense in which sheer receptivity, or the non-conceptual part of experience, provides its own representations. As we have just seen, neither can hold that receptivity can represent a complex state of affairs as such, but there is for both a sense in which it represents nonetheless. This is brought out most clearly when we focus on the distinction that Sellars points to in Kant between *sensation* and *intuition*. Here is Kant's explication of the genus representation and the places of sensation and intuition in it.

The genus is representation in general (*repraesentatio*). Under it stands the representation with consciousness (*perceptio*). A perception that refers to the subject as a modification of its state is a sensation (*sensatio*); an objective perception is a cognition (*cognitio*). The latter is either an intuition or a concept (*intuitus vel conceptus*). The former is immediately related to the object and is singular; the latter is mediate, by means of a mark, which can be common to several things. (Kant 1998: A320/B377)

A sensation is a representation, with consciousness, that refers to the subject as a modification of its state. That is, a sensation is an apperceptible mental state that does not purport to be *about* anything.²¹ We will come, in a moment, to the question of how this is compatible with it nonetheless representing something. An intuition, on the other hand, is a—get ready—singular, immediate, objective representation with consciousness. That is, it is an apperceptible mental state that does purport to be about something, that is about just one thing (as opposed to a concept, which can apply to many things), and that is immediately related to its object (again, as opposed to a concept, which relates only mediately to its object, via being combined with an intuition in a judgment).²²

The difference between a sensation and an intuition with which we will be concerned is that the latter but not the former purports to be about something. As we have seen, intuitions do this by standing in certain inferential relations with one another; intuitions are in this sense *conceptual*. It is for this very reason that sensations are *non-conceptual*. Sensations do not stand in inferential relations to one another. They never enter into judgments. They are *mere* mental states.

We must wonder, then, in what sense these mere mental states *represent*, and what role they play in cognition. It is by addressing the latter that we can come to address the former. As Sellars sees it, sensations are not something with which we simply *find* ourselves, but rather they are something that we *postulate* as an explanation of certain mental phenomena, specifically, as a way of explaining our *conceptual* responses to non-conceptual stimuli, i.e. the world. He calls this postulation the sense impression inference, and writes of it that:

[I]ts primary purpose is to explain the occurrence of certain *conceptual* representations in perceptual activity. [...] Thus, the sense impression

inference is an attempt to account for the fact that normal perceivers have *conceptual* representations of a red and rectangular object both

- (a) when they are being affected in normal circumstances by a red and rectangular object; and
- (b) when they are being affected in abnormal circumstances by objects which have other, but systematically related characteristics. (Sellars 1967:17)

On Sellars' view, we postulate sensations as a way of explaining why we respond—correctly and incorrectly—with conceptual representations to various non-conceptual stimuli.²³ The sense-impression inference is an *explanatory* postulate meant to account for the general success and occasional failure of perceptual cognition.

Of course, as an explanatory hypothesis, the sense impression inference cannot merely be that there is *some* feature of experience that explain perceptual cognition. Rather, if it is to be explanatory, it must postulate that there is a particular feature of experience with certain qualities that explain how just this feature can do just this work. As Sellars puts it vis-à-vis the sense impression inference that explains colour-concepts,

Thus, these non-conceptual states must have characteristics which, *without being colours*, are sufficiently analogous to colour to enable these states to play this guiding role. (Sellars 1967, 18)

Sensations cannot be coloured. (Anything coloured is extended; no mental item is extended; sensations are mental items.)²⁴ However, if sensations are to explain why we respond with colour-concepts to coloured physical objects, they must be in some sense analogous to coloured physical objects. They must share a *structure* with coloured physical objects. That is, they must behave in certain ways that explain both their correlation with physical objects of various colours and our conceptual responses to these. If the sense impression inference is to be explanatory, it must postulate a manifold of sensations that shares a structure with physical objects—in this case, the structure of colours.

Returning to our original concern—with spatio-temporal complexes—we can extend the sense impression inference to this realm as well. We can, and Sellars does, argue on Kant's behalf that just as Space and Time are the form of outer *intuition* (objects of possible experience all exist within a single spatio-temporal framework), there must be some *analogously* structured manifold of sensation that explains our (appropriate and inappropriate) conceptual responses to encounters with such objects. (Kant writes about a duration that is not time, for instance.) Sellars designates the analogues of space and time in the manifold of sensation as σ and τ respectively, and points out that as in the case with colours, σ - and τ -structured manifolds are not themselves spatial or temporal, but must be structured in a way closely analogous to the way that space and time are.

It is this manifold of structured *sensations* with which Sellars takes Hume to be concerned, and which he argues cannot represent anything complex as such.²⁵ The best we could muster on Hume's behalf by way of an account of how we represent spatio-temporal complexes was a manifold of non-conceptual representations structured in a way that mimicked the structure of their collective object. This is exactly what Sellars takes the manifold of sensation to be, and as we have seen, neither he nor Kant think that this is sufficient to the task at hand. Attempts to account for representations of complexes in terms of such a manifold do not have the resources to make such representations determinate in the way they would have to be to succeed. Without such determinateness, the manifold of sensations is simply inadequate to the task of representing complexes as such.

These indeterminacies, however, do not affect the role that Sellars provides for the manifold of sensations. What Sellars requires of the manifold of sensation is just that it be structurally analogous to the spatio-temporal world. He is willing from the outset to grant Hume this much. The problem with Hume, Sellars argues, is that he takes this structural analogy to be sufficient for determinate representation. Sellars sees that it is not, and replaces it with a further level of representation—conceptual representation—that he argues is sufficient. Still, Sellars, along with Kant, does refer to the manifold of sensation as a kind of *representation*, and we are now in a position to see why this is so.

Remember that Kant classifies sensations as representations that refer to the subject as a modification of its state. A sensation, that is, does not purport to be *about* anything, and in particular does not purport to be about objects in space and time. How, then, we must wonder, does it *represent* objects in space and time? The answer seems to be that the sense in which sensations stand for objects is that they stand *in* for objects.²⁶ They represent objects, not in the sense that a portrait represents a person, but rather in the sense that a lawyer represents his client—by doing work on behalf of the client that the client cannot himself do. Here, the work that is to be done is providing the proximate causal antecedent of conceptual behaviour. The fact that we make *mistakes* demonstrates that objects cannot do this work; if they did such mistakes would be inexplicable. Rather, objects enter into the story only *mediately*, through their mental *proxy*, sensations. Sensations stand in for objects in our mental lives, and by doing so provide the explanation of how it is that our conceptual behaviour comes generally to track, but sometimes mis-track, worldly objects. This is because sensations are imperfect stand-ins for worldly objects, sometimes presenting the analogue of, say, a red object, when the world contains, say, a white object in red light.

Notice that it is not just non-conceptual representations that stand in for worldly objects; i.e. Kant and Sellars do not use 'representation' differently when considering sensations and intuitions, respectively. For both Kant and Sellars, intuitions too stand in for worldly objects. As we saw earlier, they both share the view that it is by placing intuitions into inferential relations with one another that we come to represent complex states of affairs. Here the intuitions represent in virtue of their being stand-ins for the objects they represent. Of course, there is a

crucial difference between the way that intuitions represent and the way that sensations do, which allows for intuitions but not sensations to represent complexes as such. As we have seen, the former kind of representational standing-in is *conceptually* structured, whereas the latter is non-conceptually structured, in particular is σ - and τ - structured instead.

The manifold of sensations, then, represents the world of objects in space and time by standing in for this world in our mental lives. We can, with Hume, agree that this is accomplished by that manifold being structured in a way that mimics the structure of the spatio-temporal world (although it is not clear that this is achieved by *association*), while we can still maintain, *pace* Hume, that *this* kind of representation is inadequate to representing the spatio-temporal world *as* complex. It may be that each piece of the manifold of sensation represents some piece of the spatio-temporal world, but it is not the case that anything in that manifold represents anything in the world *as* related to anything else. This, we can follow Sellars and Kant in saying, is only possible via conceptual representation. Thus is the Kantian critique of Hume's account of the human ability to represent complex states of affairs completed.²⁷

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NOTES

¹ We will, for the purposes of this section, be considering representations of temporal complexes—states of affairs with distinct temporal parts—only. In the next section, we will turn to considerations meant to generalize to representations of all kinds of complex states of affairs.

² In the next section we will see Sellars and Kant argue that a sequential ordering of perceptions (or intuitions) is *not* necessary for representing temporal complexes, although *some* ordering or structure is. (Actually, both a conceptual and a non-conceptual structure are needed, eventually.)

³ More precisely, this is a feature that is necessary for the kind of account with which Hume, Kant, and Sellars are concerned, an account in which complex states of affairs are represented by complex representations. (The elements from which these complexes are constructed for each of these philosophers, of course, are quite different. For Hume this basic element is the simple perception; for Kant it is the intuition; for Sellars it is the *·*-this-such-*·*.) For Hume and Kant, I suspect that such an account just appeared natural. For Sellars, such an account is necessary for preserving his nominalist ontology. Cf. Seibt 1990. There are some contemporary philosophers who propose an alternative to this kind of account. For instance, Fodor argues that many temporally—and generally—complex states

of affairs are represented by concepts that are themselves simple, i.e. without parts that are themselves concepts. Cf. Fodor and Lepore 1992.

⁴ As is standard in Hume scholarship, I will cite both the book, part, section and paragraph numbers from the Norton and Norton edition of the *Treatise* (Hume 2002) [T] and the page numbers from the Selby-Bigge edition (Hume 1978) [SBN].

⁵ This is Hume's story about singular representation. Of course, he also has a story to tell about general, or *abstract*, representation that is not as straightforward. Still, though, even in his story of abstract ideas, language, and custom there is an essential part played by singular representations that *are* images, and the *resemblance* between these.

⁶ It is worth noting reading the Copy Principle as Hume's principle of *intentionality*; reading it as determining what a perception is a perception *of* is a somewhat controversial position. This is at least because, when combined with the further (also somewhat controversially) Humean thesis that impressions are not copies of anything, this commits us to the position that only *ideas* have intentionality, impressions do not have intentionality, and ideas are all of impressions. I would argue that all of these are claims that Hume would make, but there is not space enough here to do so.

⁷ This is not to say that 'force' and 'vivacity' are used *unambiguously* to mean only the manner in which ideas appear in the mind, even in Hume. It might very well be the case that Hume sometimes uses 'force' and 'vivacity' to speak of the manner in which ideas appear in the mind, and sometime uses them to speak of certain pictorial aspects of certain ideas. (For example, 'that is a *vivacious* shade of red'.) Rather the point here is just to make room for the former, manner-of-appearing, use of these terms. It is the possibility of using 'force' and 'vivacity' *this way, in addition to* the pictorial use, that gives Hume's theory a stay of execution here. So long as Hume is committed to *just* the pictorial use, he can safely use 'force' and 'vivacity' to describe features of *representings* without also using it to describe features of *representeds*.

⁸ Of course, *real* carbon-dating only works because we have ways of *independently* corroborating its accuracy. Whether and what Hume's way of providing such evidence for the correlation of the degree of force and vivacity of a perception with the time at which the perception first appears in the mind is unclear at best.

⁹ Of course it is *Kant* who is the most vocal advocate for the view that there is only *one* time, and that all *times* are a part of it. 'For simultaneity or succession would not themselves come into perception if the representation of time did not ground them *a priori*. Only under its presupposition can one represent that several things exist at one and the same time (simultaneously) or in different times (successively)' (A31/B46). Of course, Kant puts this fact to a distinctly different use.

¹⁰ As Hume accounts for conceptual relations between ideas *via* the connections of ideas as they occur in our minds, things get complicated here. The thought, though, is that these ideas bear the special association relation to one another that is the *conceptual* association, as opposed to other ways of associating ideas.

¹¹ For instance, Hume *could* hold that such cases merely make our representations of temporal sequences *false*, rather than voiding their status as representations altogether. He could also pursue a line on which these factors are, somehow, accounted, or compensated, for in the coordinating of degrees of force and vivacity with the time of the original impression formation.

¹² It is also worth noting here is that while Hume's picture may seem a not entirely implausible way of representing a sequence of *experienced* events, it would not seem to be at all capable of speaking to how we go about representing a sequence of *fictional* events as such. That is, we are capable of representing temporally complex states of affairs as such

even when they are merely imagined states of affairs, and in such a case it would seem entirely possible that each of the images that compose the parts of the fictional sequence would be equally forceful and vivacious. (They could all be as weak and feeble as any fantasy is, on Hume's account.) If this is right, however, it would seem that we are capable of representing temporally complex states of affairs without recourse to differences in the degree of force and vivacity of the component perceptions at all. Furthermore, it should be clear that the system outlined here applies *only to temporally* complex states of affairs, and there is not obvious way to extend this to complex states of affairs more generally.

¹³ That is, both receptivity and the understanding are *first and foremost* faculties for representing *the world*. This is not to say that this is *all* that each can represent, or that each does not sometimes *mis*represent the world. Rather, it is to claim that as Kant and Sellars see it, the primary function of each of the faculties—the function that makes any other uses of these faculties possible—is veridically representing the world.

¹⁴ He also thinks that there is a sense in which sheer receptivity can represent. More on this later.

¹⁵ We must tread very carefully here, for Sellars does claim that 'not only are predicative *expressions* dispensable, but the very *function* performed by predicates is dispensable' (Sellars 1980: 59). As is clear from the quotation in the main text, he does not mean by this that there could be a language that consisted merely of names. Rather he means that predicates do not themselves represent anything, and so have no *semantic* function, strictly speaking. They still play a role, however, in *structuring* language. In particular, they are ways of structuring names, which structured names represent the ways that worldly objects are.

¹⁶ In saying that it is predicates that allow us to represent complex states of affairs as such, I do not mean to imply that predicates *themselves* represent any kind of object. Rather, predicates allow us to position our representations of objects in an inferential structure that, in turn, represents these objects as connected to one another in determinate ways. (It is worth noting that this is the case even with monadic predicates. The role of such predicates, like others, is to place the name of an object into an inferential structure, i.e. into inferential relations with other objects.)

¹⁷ It is important to note here that language-entry and language-exit moves are *not* themselves inferences. On pain of robbing Sellars' system of crucial parts of its epistemology, philosophy of perception, etc., inferences are strictly intra-linguistic moves. Still, language-entry and language-exit moves do contribute essentially to the inferential role of a linguistic item. That is, linguistic items are often, if not always, defined in part by their relation to certain language-entry and language-exit transitions.

¹⁸ Most prominently, of course, by Sellarsians themselves: cf. Rosenberg 2005; Brandom 1994.

¹⁹ Cf. Sellars 1953.

²⁰ Notice that this much is admitted by even the most robust naturalist about concepts (e.g. Fodor 1990).

²¹ I take it that when Kant says that a sensation *refers* to the subject as a modification of its state, he means 'refers' here in the way that we do when we speak of, for instance, referring someone to a doctor. That is, sensations point towards, or are an indication of something in, the state of the perceiver, but they are not *about* the state of the perceiver. It is certainly *not* Kant's position that sensations are all *of* oneself. Such a position is one that Kant takes, for instance, Descartes to hold, and is one that he seeks to correct.

²² Returning to our earlier discussion of Sellars, intuitions are *like* names in that they stand for objects; concepts are like predicates in that they provide for *ways* of relating intuitions to one another so that the complex formed represents the world.

²³ This is the *primary* reason for making the sense impression inference. Once made in this case, however, it also becomes appropriate to make in the case of, say, animals who do not respond *conceptually* to anything, but who clearly *represent* complexes nonetheless.

²⁴ This is, for Sellars, an argument that can only be given in the Manifest Image in which colours are properties of physical objects. In the Scientific Image, for Sellars, it will turn out that, in fact, it is *only* *sensa* that are coloured.

²⁵ Of course, Hume is concerned with this aspect of mental representation because he thinks it can do the work involved in representing complexes as such. Clearly, Sellars' thinks that this Humean thesis *about* sensations is a mistake.

²⁶ Cf. Rosenberg 1986.

²⁷ I would like to thank Alan Nelson, Jay Rosenberg, Jesse Prinz, and the anonymous referee at the *European Journal of Philosophy* for their helpful feedback on this paper. This paper was first presented at the Carolina Philosophy Retreat at Cranberry Lake.

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