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## Quality Spaces, Relocation, and Grain

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### Introductory

Few of Sellars's views are as challenging both to interpret and to evaluate as those about sense impressions and the mental qualities in virtue of which sense impressions resemble and differ. Beginning with the grain argument advanced in PSIM VI<sup>1</sup> (SPR 35, ISR 403–4) and the related suggestion that “[t]he logical space of sense impressions” will have to be “transposed into a new key and located in a new context” (IAMB VI, ¶45; ISR 365), Sellars's views about sense impressions have defied easy understanding. These exegetical difficulties persist even in Sellars's 1981 Carus lectures (FMPP),<sup>2</sup> arguably his most complete effort to deal with these issues.

These challenges in interpretation reflect the difficulties Sellars saw in smoothly folding sense impressions into the natural order, in particular, in squaring mental qualities with a scientific view of things. I argue here that these difficulties are not, as many have held,<sup>3</sup> essential to the nature of mental qualities themselves. Rather, I argue, the difficulties Sellars sees stem entirely from a single aspect of his account of sense impressions, that this aspect is not central to that account, and that the aspect causing difficulty can be cleanly and fruitfully detached from the rest of his position. The resulting adjustment, I argue, not only is independently defensible, but both preserves and enhances the spirit of the account Sellars actually gave.

I begin in section 1 by diagnosing the main source of the widely held view that mental qualities resist a physicalist and naturalist treatment, together with a traditional response to that perceived difficulty that many still find tempting. Sellars himself adopted that response but, as is typical in his thinking, in a novel and strikingly subtle

<sup>1</sup> References to Sellars's works follow the system of abbreviations given in this volume.

<sup>2</sup> Jay F. Rosenberg (1982), in his impressive and useful “The Place of Color in the Scheme of Things: A Roadmap to Sellars's Carus Lectures,” argues compellingly that the Carus Lectures are continuous with Sellars's earlier views, and largely develop them more fully.

<sup>3</sup> e.g., Nagel (1974) and Chalmers (1996).

way, and I lay out Sellars's version of that response. And I describe an implication of adopting that traditional response, Sellars's version included, an implication that to my knowledge has not generally been noticed. It's that unnoticed implication, I'll eventually argue, that is responsible for the difficulties Sellars sees in giving a naturalist account of sense impressions.

Section 2, then, takes up some issues that pertain to Sellars's Myth of the Given and his powerful undermining of that Myth by appeal to the counter-myth (EPM, §63) of Jones's folk theorizing. In section 3, I outline a theory of mental qualities that preserves the spirit and virtually all the letter of Sellars's own account, but nonetheless avoids the implication that causes trouble. In the concluding section 4, I spell out how avoiding that implication makes possible a theory of mental qualities that is distinctively Sellarsian in spirit, acknowledges the ultimate homogeneity that Sellars insisted sense impressions exhibit, but shows why such ultimate homogeneity causes no difficulty of the sort Sellars saw for a naturalist account of sense impressions.

## 1. Relocation and Consciousness

Since Galileo proclaimed that the book of nature "is written in the language of mathematics,"<sup>4</sup> philosophers have struggled to make our common-sense picture of reality fit comfortably with the dictates of natural science. This has not proved easy. Our common-sense picture includes much that resists mathematical formulation, from colors and sounds as they appear to us in perception to the manifest natural kinds that populate the world around us.

Sellars's effort to fuse the manifest and scientific images constitutes one of the richest and most penetrating attempts to make room for mathematically recalcitrant manifest properties within a scientific worldview. And much of what he says about this is, I believe, important, correct, and revealing about the issues. But I'll argue that the view about sense impressions that figures in this attempt to square the manifest image with science embodied a mistaken strand, though one we can readily detach from the rest without damaging what's left or significantly altering his overall account. My goal is to sketch how things look once we detach that mistaken strand.

It will be useful to begin with the problem about sense impressions independent of Sellars's particular take on it. How might the physical redness of an apple, as that redness appears to us, succumb to scientific treatment? How can a mathematical physics accommodate such manifest redness? The traditional move has been to accept that such properties resist mathematical treatment, and simply banish them from the physical realm altogether, relocating them as mental properties of our sense impressions. The Galilean dictum then holds for everything physical; mental properties stand apart from the physical.

<sup>4</sup> Galileo Galilei (1957/1623): 238.

On this line, which I'll call the relocation story,<sup>5</sup> the redness that's manifest to us is not a property of anything physical that we perceive, but rather a matter of mental qualities that occur when we perceive those physical things. So all that remains in the physical realm are mere reflectance properties, which do readily lend themselves to mathematical, and hence scientific, treatment. Similarly for all the Aristotelian proper sensibles, from color and sound to taste and smell, at least as those ostensibly physical properties are experienced by us.

This relocation story fits comfortably with, and even points toward, some form of dualism, if not substance dualism then at least a property dualism that casts the relocated mental qualities as nonphysical. But many, Sellars among them, who find some form of this relocation story inviting, wish nonetheless to resist the dualism that seems to come in its train. The problem is how to relocate to the mind the properties that seem to resist scientific treatment while avoiding any consequent mind-body dualism.

Even apart from its apparent dualist implications, such relocation isn't free. One obvious cost is that whatever it is that seems problematic about manifest physical colors and other physical proper sensibles will show up in the mind. On Sellars's view, the pivotal problematic aspect is ultimate homogeneity. The colors of physical objects are, as they appear to us, ultimately homogeneous in that any proper part of a patch of color will itself be colored. If we relocate physical colors to the mind, mental qualities of color should exhibit such ultimate homogeneity as well. I'll return to this perplexing issue in section 4.

But there is another striking cost to the relocation story that is seldom noticed. It has to do with such spatial properties as shape, size, and location. We see the sizes, shapes, and locations of physical objects by seeing boundaries among colors (cf. *SR II V* ¶54; *PHM* ¶36, in *SPR* 75, n., citing Berkeley). By contrast, when we sense by touch the very same physical spatial properties of objects, we do so by sensing instead the boundaries that hold among contrasts in resistance, pressure, and texture.

So the properties of mental states in virtue of which we see spatial physical properties are inseparable from mental qualities that pertain to color. By contrast, the mental properties in virtue of which we sense those same physical properties by touch are inseparable from mental qualities that pertain to physical pressure, texture, and resistance.<sup>6</sup>

These observations put pressure on the relocation story. Whatever the temptation to recast colors and other proper sensibles from being physical properties of perceived

<sup>5</sup> I discuss this move at some length in ch. 6 of Rosenthal (2005).

<sup>6</sup> This bears on William Molyneux's famous question to John Locke (*An Essay Concerning Human Understanding*, 2nd and later eds., II, ix, 8) about whether a person born blind would on gaining sight right away be able to recognize visually the shapes that person can discriminate tactilely. Recent claims based on empirical findings that such a person would be able to do so are seldom compelling; see, e.g., Schwenkler (2013: 86–96) and (2012: 186–8), and Rosenthal (2005: 221 and 222 n.). For a revealing empirical study, see Held et al. (2011: 551–3).

objects to being nonphysical, mental properties, there's no corresponding temptation to relocate spatial properties.<sup>7</sup> But if we relocate colors, for example, must we not also relocate the boundaries that constitute visible sizes and shapes? I'll return to this question in sections 3 and 4.

But there is yet another implication of the relocation story, Sellars's version again included, which also typically goes unnoticed and has even deeper consequences for how we treat mental qualities. Ostensibly physical proper sensibles resist mathematical treatment only as we are aware of them. Sellars's famous example of a pink ice cube "presents itself to us *as*—we are aware of it *as*—over *there*" (FMPP III §15; quoted emphasis herein is always Sellars's own). And it's only as we are visually aware of the pink ice cube that its apparent property of being pink resists the mathematical treatment that wavelengths, molecules, and physical shape readily lend themselves to.

This is where the unnoticed implication of the relocation story arises. When we think of the manifest pinkness of the ice cube that we see, we are thinking of that property specifically as we are aware of it, not as that property is in itself, independent of being perceived. So if we relocate that manifest physical pink to the mind, we will also conceive of that relocated property specifically as we are aware of it.

This is important because a mental state of which we are aware is a conscious state. Consider a situation in which there is compelling evidence that somebody is in some mental state, but the person sincerely denies being in any such state; the person is altogether unaware of being in it. In such cases we conclude that the person is indeed in the mental state in question, but that the state is not a conscious state. A state's being conscious is accordingly a matter of the individual's being aware of that state in some suitable way.

There are refinements in specifying that suitable way. An especially central qualification is that a state is not conscious unless one is aware of it in a way that subjectively seems to be unmediated. Traditional writers have often assumed that the awareness must be actually unmediated, but that's not necessary; the awareness of the state must simply seem subjectively to be unmediated.<sup>8</sup>

So if we relocate the manifest pinkness of Sellars's pink ice cube, we are relocating an ostensibly physical property not as that property occurs independent of our awareness of it, but rather as we are aware of it. And since the relocated mental pinkness carries along all of its properties displaced from the physical realm, we will conceive of that mental pinkness only as we are aware of it, indeed, aware of it in a way that subjectively seems unmediated. The traditional relocation picture, by itself, forces us to conceive of sense impressions as automatically conscious.

It's important to distinguish mental states' being conscious from an individual's being conscious. If one is in some mental state but in no way at all aware of being in that

<sup>7</sup> Thus Jackson (1977) in effect recommended relocation for colors but not spatial properties. For discussion of Jackson's view, see Rosenthal (1999) and (1985).

<sup>8</sup> On these and related refinements and qualifications, see Rosenthal (2005), esp. chapters 1–4.

state, that state is not a conscious state; equivalently, for a state to be conscious, one must in some way be aware of it.<sup>9</sup> But we have overwhelmingly good reason to think that even when fully awake and alert we are in very many mental states that are not conscious. Even purely qualitative perceptual states occur without being at all conscious, as in subliminal perception. It is crucial for what follows not to conflate a mental state's being conscious with the individual's being conscious.

The foregoing implication is essential to the relocation story. It's only as we consciously perceive colors and other proper sensibles that the need to relocate arises. Insofar as such properties occur independent of our consciously perceiving them, there is nothing that resists thoroughgoing mathematical treatment; the temptation to relocate to the mind results only when we consider colors and the like as we are aware of them. Since the properties we relocate are problematic only insofar as we are aware of them, it must be that the relocated mental versions are properties that we are invariably aware of.

Despite the special twist Sellars gives to the relocation story, he would not contest this line of reasoning. "The *esse* of cubes of pink is," he writes, "*sentiri*" (FMPP III §66). This holds both for the manifest physical cubes of pink and for the states of ourselves by virtue of which we sense those physical cubes. Indeed, Sellars sees this relocation as at bottom simply a "recategoriz[ing]" of the physical cubical volumes of pink that we see "as sensory states of the perceiver" (FMPP III §44; cf. §47). As he puts it at greater length:

[T]he theory of sense impressions does not *introduce*, for example, cubical volumes of pink. It reinterprets the *categorial status* of the cubical volumes of pink of which we are perceptually aware. Conceived in the manifest image as, in standard cases, *constituents* of physical objects and in abnormal cases, as somehow 'unreal' or 'illusory', they are *recategorized* as sensory states of the perceiver and assigned various explanatory roles in the theory of perception.

(FMPP III §44)<sup>10</sup>

So in Sellars's hands, the relocation story is not simply a solution to the problem posed by mathematical physics. It is also an account of how we could come to be able to think about sense impressions in the first place. We come to be able to think about sense impressions of pink cubes by first thinking about volumes of pink that we seem to see, and then recasting the manifest pinkness as properties of perceptual states of ourselves. A sense impression of a red triangle, for example, is an inner state that is modeled on a red and triangular wafer, though with a suitable commentary that qualifies the way the state resembles that model (EPM, §§60–1).<sup>11</sup> It is this feature of Sellars's view that will occupy us in the next section.

<sup>9</sup> See, e.g., Rosenthal (2005), esp. chapters 1 and 2.

<sup>10</sup> And: "The pinkness of a pink sensation is 'analogous' to the pinkness of a manifest pink ice cube, not by being a *different quality* which is in some respects analogous to pinkness..., but by being the same 'content' in a different categorial 'form'" (FMPP III, §47).

<sup>11</sup> "[T]he model is the idea of a domain of 'inner replicas' which, when brought about in standard conditions share the perceptible characteristics of their physical sources" (EPM §61 [1]).

Does Sellars's subtle use of the relocation story to explain how we come to be able to think about sense impressions and their distinguishing mental qualities affect the implication that sense impressions thus conceived are invariably conscious? The theoretical motivation to posit sense impressions is to explain the occurrence of perceptual thoughts. "[S]ense impressions...are common sense theoretical constructs introduced to explain the occurrence not of white rat type discriminative behavior, *but rather of perceptual propositional attitudes*" (IAMB, ¶49 in the original; see PPME p. 187).<sup>12</sup>

I'll return to this feature of Sellars's thinking about sense impressions in section 3. What matters for now is that this twist on the relocation story does not affect the implication that sense impressions thus conceived cannot occur without being conscious. Independent of how we come to have concepts of sense impressions, the apparent need to relocate physical colors and other proper sensibles arises only in connection with those perceptible properties as we are conscious of them. So it's in the very nature of the mental qualities that result from such relocation that we are aware of them, and that the sense impressions that resemble and differ in respect of those mental qualities are invariably conscious states.

It's the implication that sense impressions are invariably conscious that calls for the adjustment I'll argue we must make in Sellars's view. Indeed, we cannot avoid such an adjustment. We typically perceive physical colors and other proper sensibles consciously. But we also perceive proper sensibles subliminally, and hence nonconsciously. Acknowledging that perceiving sometimes isn't conscious makes unavoidable the conclusion that not all sensations of color are conscious.<sup>13</sup>

<sup>12</sup> IAMB originally appeared in *The Review of Metaphysics*, 18, 3 (March 1965): 430–51; when reprinted in *Philosophical Perspectives* (PP) in 1967, Sellars omitted the paragraph that includes the passage quoted here. This omission was presumably due to his having come to refine his view to hold that we posit sense impressions primarily to explain the "occurrence of ['minimal conceptual representations'] in perceptual activity" (SM I §42; cf. §§43–5). (In PPME, 2011, a reprint of Part II of PP, the paragraph in question is provided on pp. 187, with an indication that it occurred in the original published version of IAMB but was subsequently omitted.) In any case, the difference between the original and refined view does not matter here. Cf. EPM, §14–22, about the use of 'looks' and the example of the blue necktie that looks green for further background about Sellars's reasons for the need to posit sense impressions.

In SSOP, Sellars stresses the perspectival aspect of the perceptual propositional attitudes (§28–31). (I'm grateful to Johanna Seibt [personal communication] for calling my attention to that passage.) Seibt also notes that these paragraphs suggest that there may be more to the seeings referred to in that passage than just intentional content, though I believe that one can equally well understand the relevant seeings as purely intentional.

<sup>13</sup> Acknowledging the occurrence of seeing that isn't conscious likely also undermines the motivation for insisting, as Sellars does, that we regard color terms as mass nouns for color "stuff." Thus Sellars writes, "the concept of a red physical object is simply that of an individuated volume of red stuff which behaves in generically stuffy ways; and, specifically, in the manner characteristic of a determinate thing kind" (FMPP, I §62). Cf. "I shall argue that the phenomena can be saved by supposing our basic concept pertaining to red to have the form of a mass term, the predicative concept *is red* having the form *is an expanse of red*" (FMPP I §46). Also, "[i]t is most important to note, in view of the systematic grammatical ambiguity of color words, that to make explicit the categorial status of the term 'red' in the phrase 'an expanse of red', the latter should be reformulated as 'an expanse of red *stuff*', where 'stuff' carries with it implications concerning the causal role of determinate portions of stuff in the physical world" (FMPP I §47).

The need to relocate stems from proper sensibles as we're consciously aware of them. But might we nonetheless relocate those properties independently of how we're aware of them, with no attendant need to conceive of the relocated mental qualities as automatically conscious? No. It is that aspect of the relocated manifest properties that occurs only as we consciously perceive them that is problematic for the mathematical treatment that a scientific treatment requires, as Sellars puts it, problematic for the particulate natures of the scientific image. What needs relocating is just the aspect that occurs in connection with apparent conscious perception of proper sensibles. And relocating that aspect results in conceiving of them as intrinsically conscious.

If a mental quality is conscious, one has first-person access to the state that exhibits that mental quality. So if being conscious is intrinsic to mental qualities, it's also intrinsic to them that we have first-person access to them. We do have some third-person access to others' being in particular types of qualitative states; we often know when others see or hear something. But such third-person access is of course not intrinsic to those states. So if the first-person access one has to one's own sense impressions is intrinsic to those states, that first-person access will trump whatever third-person access others may have to them.

The alleged intrinsic authority of first-over third-person access is what gives rise to the allegedly pretheoretic intuitions some profess to have that inversion or absence of mental qualities is possible, or at least conceivable. Only if first-person access were decisive would it make sense to imagine that your mental quality on seeing something red could be the same as mine on seeing something green. It is these so-called intuitions, moreover, that seem to underwrite the so-called explanatory gap and "hard problem," the apparent difficulty in principle of explaining why a particular neural state should give rise to one mental quality rather than another, or to none at all.<sup>14</sup>

## 2. Jones's Theory and the Given

Conceiving of the mental qualities of sense impressions as relocated versions of perceptible properties as we're consciously aware of them unavoidably brings with it the view that sense impressions are intrinsically conscious. So on this conception we invariably have subjective, first-person access to those states. And this affects what we say about the Given.

If it is intrinsic to sense impressions that we have first-person access to them, that access is unmediated. A state's being conscious implies that one is aware of it in a way that seems subjectively to be unmediated, though it may not be. But presumably nothing mediates between a state and its intrinsic properties; so if a state's being

These ideas seem compelling in connection with physical red as it is consciously seen, not as red is independent of being consciously seen. So acknowledging seeing that isn't conscious would likely undermine those ideas. But that question would take us well beyond the scope of the present discussion.

<sup>14</sup> I discuss these connections in detail in Rosenthal (2010). On the explanatory gap, see Levine (2001: 76–80); on the hard problem, see Chalmers (1995).

conscious is intrinsic to that state, the lack of mediation is real, and not merely apparent. And if we have unmediated access to sense impressions, those sense impressions and the mental qualities in respect of which we have such access are in that way Given.

This is simply a consequence of traditional versions of the relocation story. Indeed, it is likely that adoption of that story explains why it has seemed inviting to regard sense impressions as Given. But Sellars has a characteristically ingenious way to hold onto the relocation story while avoiding the consequence about being Given.

As already noted, our concepts of sense impressions “are analogical extensions of concepts pertaining to the public or intersubjective world” (BBK §24). Indeed, this is a salutary aspect of the twist Sellars gives to the standard relocation story. And since our first-person access to sense impressions itself relies on, or in any case reflects and conforms to, the concepts we have of those states, that first-person access itself also relies on “analogical extensions of concepts pertaining to the public or intersubjective world.” Mental qualities are relocated forms of perceptible properties banished from physical reality, but our concepts of mental qualities rely on concepts we have of those perceptible properties.

Sellars’s epitomizes the point in SRII by distinguishing, in quasi-Aristotelian fashion, between what’s prior in the order of knowing from what’s prior in the order of being. “[V]isual impressions are prior *in the order of being* to concepts pertaining to physical color,” because manifest physical colors are, on his view, projections of mental qualities. That’s the ontological relocation of manifest physical colors to the mind. “[C]oncepts of sense impressions . . . so to speak, project or transpose the attributes of sense impressions into the categorial framework of physical things and processes” (SRII V ¶57). The ascription of colors to physical objects is a projection onto those objects of properties that actually belong to sense impressions.

Nonetheless, we can reject the Given—the idea that we have unmediated first-person access to sense impressions as such—since our concepts of color sense impressions rest on concepts of manifest physical colors. Our concepts of physical colors “are prior *in the order of knowing* to concepts pertaining to visual impressions.” “[A]lthough the conceptual framework of physical color is in this sense ontologically grounded in visual impressions, the conceptual framework in terms of which common sense conceives these impressions is itself an analogical offshoot from the conceptual framework of physical color and shape” (SRII V ¶57).<sup>15</sup>

Distinguishing ontological from conceptual priority in this way enables us to retain a version of the relocation story and yet avoid the Given. Our subjective first-person access to sense impressions is cast in terms of concepts that derive from intersubjective concepts for perceptible properties of physical objects.

<sup>15</sup> For Sellars’s application of this crucial distinction between order of being and order of knowing to the case of intentional states, see IRH in PPME, §§3–6. See also Rosenthal, “Intentionality,” chapter 3 of *Consciousness and Mind* (2005), §§3–4.

Drawing that distinction allows us to avoid the Given. But it cannot by itself sidestep the implication of the relocation story that sense impressions are intrinsically conscious. As noted in section 1, relocation applies to colors and other proper sensibles specifically in respect of the way we consciously perceive them. And since we initially conceive of manifest physical colors as we consciously perceive them, we will also conceive of the relocated sense impressions as we're aware of them. So we'll conceive of them as being automatically conscious; their being conscious will be an aspect of their intrinsic nature. Conceiving of sense impressions in terms borrowed from concepts for manifest physical colors does nothing to avoid this result.

On any version of the relocation picture, Sellars's included, sensations are intrinsically conscious. But did Sellars explicitly draw that conclusion? There is reason to think he did take it for granted that it's intrinsic to sense impressions that they're conscious, though it's not obvious that he saw that view as resulting from his version—or any version—of the relocation story. It may be that he simply assumed that traditional view of sense impressions as correct and unavoidable.

One reason to see Sellars as having held that sense impressions are intrinsically conscious is that he never talks about subliminal sense impressions, though it was widely recognized at the time he wrote that perceiving is sometimes subliminal. In addition, he describes “[t]he *esse* of cubes of pink . . . [as] *sentiri*” (FMPP III §66), making clear that this applies to the “sensory states of the perceiver” no less than the physical cubes (FMPP III §44). He seems here to accept the traditional view that qualitative mental states cannot occur without being conscious. And he speaks of sense impressions specifically “*as states of consciousness*” (SM I §41).<sup>16</sup>

Sellars does say that there is no contradiction in states of consciousness that aren't noticed or apperceived (SM I §24).<sup>17</sup> But that may well mean only that sensations, though always conscious, need not be attended or introspected. And whatever not being noticed or apperceived amounts to, the absence of contradiction in a sensation's going unnoticed or unapperceived need not imply that sensations can occur without being conscious.<sup>18</sup>

<sup>16</sup> One might urge that this last point is far from decisive; ‘state of consciousness’ is equivocal, meaning either a state that is conscious or a state in virtue of being in which one is conscious of something. But Sellars held in those years that “all awareness . . . is a linguistic affair” (EPM §29). And since sense impressions have on his view no intentionality and so are not linguistic, his remark at SM I §41 that sense impressions are states of consciousness could not have meant that they are states in virtue of being in which one is aware of things.

Later, in MEV (1981), Sellars modified this position and allowed for a type of innate, prelinguistic awareness (§57). But even there he seems to countenance only awareness that, by being innate, is independent of language, and not on that account awareness that results simply from sense impressions. In addition, MEV appeared thirteen years after the remark at SM I §41, when he still held to the “*psychological nominalism*” of EPM, on which “all awareness . . . is a linguistic affair” (§29).

<sup>17</sup> I am grateful to Willem deVries (personal communication) for stressing this passage in this connection.

<sup>18</sup> Even Brentano, who held that our awareness of perceptions is intrinsic to their nature, acknowledged that “[a]n unconscious consciousness is no more a contradiction in terms than an unseen case of seeing” (Brentano 1973/1874: 79; cf. 128).

Sellars also allowed that we might be aware of sense impressions without being aware of them specifically as sense impressions. One can, he insisted, be aware of something without thereby being aware of its categorial status. Indeed, to think otherwise “is, perhaps, the most basic form of... ‘The Myth of the Given’” (FMPP I, §44; cf. §§152–3 and EPM §29).<sup>19</sup> So it could be that we are always aware of sensations, and hence that it is part of their intrinsic nature that they occur consciously, even though we are not thereby aware of sensations in respect of their being sensory states of oneself.

Would being aware of what are in reality sensations of color but not being aware of them as sense impressions result in those sensations’ being conscious? One might think not. Perhaps if one is aware of mental qualities of color but takes them to be manifest properties of physical objects, one would not thereby be aware of oneself as having sensations.<sup>20</sup>

But being aware of what is in reality a sensation would make that sensation conscious even if one is mistaken about the nature of what it is that one is aware of.<sup>21</sup> If I’m aware of a bush but in the darkness take it to be a bear, I’m nonetheless aware of a bush, though not aware of it as a bush. Similarly, being aware of something as a colored physical object in front of one simply is, on Sellars’s view, being aware of something that is in reality a sensation of a volume of color, though one mistakenly conceptualizes the thing one is aware of as a colored physical object. One is aware of a sensation, but not as a sensation. All this fits comfortably with Sellars’s having simply taken for granted that sensations are invariably and intrinsically conscious.

One might insist that consciousness cannot misrepresent, that for a mental state to be conscious one must be aware of it accurately in respect of its nature. I have argued elsewhere that this is not so (Rosenthal 2011, and 2012: §4). It appears subjectively that we cannot be in error about the nature of our conscious mental states because there is no subjective check on the way consciousness represents those states. But we do have independent checks on the accuracy of consciousness, checks that do not rely on first-person access. And there is, moreover, evidence that we are sometimes aware of our perceptual states inaccurately.<sup>22</sup>

A mental state is conscious if one is aware of it in a suitable way. Still, it’s reasonable to hold there are limits to how much one’s awareness of the state can misrepresent the state and have the state nonetheless be conscious; a sensation would presumably not be conscious if one was aware of it as, for example, a table. And one might contend that being aware of a sensation of a volume of color as a colored physical object also crosses

<sup>19</sup> This echoes the idea that all awareness involves intentionality and is in that way “a linguistic affair.”

<sup>20</sup> I am grateful to David Pereplyotchik and James O’Shea for pressing this concern.

<sup>21</sup> Indeed, Sellars countenances cases of conscious sensations in which “the perceiver [does not] conceptualize his sensation *as* a sensation” (SRPC ¶60).

<sup>22</sup> e.g., from change blindness; see especially Grimes (1996). Consciousness also sometimes tells us our perceptions have not changed when there is ample independent evidence that they have. See Fernandez-Duque and Thornton (2000); Laloyaux, Destrebecqz, and Cleeremans (2003); and Silverman and Mack (2006).

the line; perhaps being aware of a sensation in that way would not result in its being conscious.

But there is reason to think that Sellars did not think so. Being aware of something as a colored physical object is, on his view, being aware of a sensation of a volume of color, albeit under a categorial misdescription; that's once more the upshot of Sellars's version of the relocation story. Though one's awareness of the sensation would misrepresent the sensation, it would do so in a systematic way, indeed, a way to be expected of anybody who has not, according to Sellars, fully thought through the theoretical issues in question.

And in any case mistaken awareness of a mental state can be very dramatic and still result in that state's being conscious. Consider the puzzling phenomenon of thought insertion, in which one takes another agent to have caused a thought to occur in one's mind, and is aware of the thought as not being one's own.<sup>23</sup> It is controversial how to explain these cases, but plainly the thought is conscious despite one's being aware of it in a dramatically inaccurate way. Highly dramatic misrepresentation in the way one is aware of a mental state need not result in its not being conscious.

Awareness of mental states need not be cast in terms of any particular concepts of the nature of those states or the nature of mind for such awareness to result in the states' being conscious. One's mental states could presumably be conscious even if one lacked any accurate or sophisticated grasp of the nature of those states. The temptation to think that the awareness that results in one's mental states' being conscious must represent them as mental states in some particular way is simply a residue of holding that mental states are intrinsically conscious and so represents them accurately in respect of their nature. But mental states are not intrinsically conscious, and even if consciousness were intrinsic to those states that are conscious, that would not guarantee accurate representation of their nature.

Sellars's goal was to explain "how we could have arrived at th[e] idea" of states with the explanatory power that sense impressions must have (EPM §60). The danger was that this might require conceiving of sense impressions as Given. His solution is that the concepts in terms of which we conceive of sense impressions derive from our concepts for manifest perceptible properties of physical objects, for example, concepts for colored objects (EPM §§60–1, BBK, §§24–6). But conceiving of the mental qualities of sense impressions as relocated from manifest colors implies conceiving of them as intrinsically conscious, since relocation is motivated only by our conception of manifest colors specifically as we are aware of them.

It's useful to compare the situation with sense impressions to Sellars's account of the first-person access we have to our own intentional states. Jones first teaches his contemporaries to posit intentional states as folk-theoretical posits that explain the occurrence of meaningful, nonparroting speech acts as well as pieces of rational non-verbal behavior, that is, nonverbal behavior that is covered by explanations that also

<sup>23</sup> See, e.g., Mullins and Spence (2003), and Martin and Pacherie (2013).

pertain to sincere speech. This allows his contemporaries to ascribe intentional states to one another and to themselves, initially relying solely on such behavioral evidence.

But then Sellars writes, in a passage that has provoked much discussion,

it now turns out—need it have?—that [Jones's contemporaries] can be trained to give reasonably reliable self-descriptions, using the language of the theory, without having to observe [their] overt behaviour. . . . What began as a language with a purely theoretical use has gained a reporting role. (EPM §59)

The reporting role Sellars speaks of is the ability to ascribe mental states to oneself without relying on any behavioral or other third-person evidence or cues, as we would put it, relying solely on one's subjective, first-person access to those states. And even though the concepts used in such reports derive wholly from the theoretical reasoning Jones introduced in positing the relevant states, his contemporaries come to have access to their own states that is subjectively unmediated. The reports they come to be able to make of those states seem subjectively not to rely on any inference or observation.

Reporting something, moreover, requires being aware of that thing. So Jones's contemporaries must be aware, in a way that itself seems subjectively unmediated, of the states they come to be able to report in this way. Since states are conscious if one is aware of them in a way that seems subjectively unmediated, the states Jones's contemporaries come to be able to report in a subjectively unmediated way come thereby to be conscious states.

What to make of Sellars's cryptic 'need it have'? Must it have turned out that Jones's contemporaries would come to have such access? There are compelling reasons to think that development did have to occur.

Before coming to be able to report in a subjectively unmediated way, Jones's contemporaries posit thoughts in their own case as well as others', relying in both types of case just on behavioral evidence. In time they gain facility in self-ascribing, and the theory itself figures in gaining that facility. They come to be disposed, for example, to say 'I think it's raining' whenever they actually say that it's raining, since Jones's theory tells them that whenever they do say it's raining they have the corresponding thought. Simply performing a speech act suffices by itself for the self-ascribing of an intentional state with the same intentional content and a mental attitude that corresponds to the illocutionary force of the speech act.

As the disposition to self-ascribe such thoughts comes to be increasingly strong, moreover, Jones's contemporaries come to be disposed to say 'I think it's raining' even when they do not engage in any speech at all, but simply are disposed to say that it's raining. So they come to be, as we are, roughly as likely to use one type of locution as the other,<sup>24</sup> and hence readily able, in the case of intentional states, to make subjectively unmediated first-person reports of those states.

<sup>24</sup> Set aside for these purposes refinements about whether one locution sometimes carries an air of hesitation; either form of words can carry hesitation, or neither. And all that matters for present purposes is that the two types of locution come to be largely equivalent in respect of conditions for appropriate use.

Having the thought that it's raining often disposes one to say that it's raining, even when that disposition does not issue in a speech act. When Jones's theory has become strongly incorporated into one's ways of thinking, being disposed to say that it's raining comes to carry with it a disposition to say that one thinks it's raining. And being so disposed reflects an awareness of one's thought that it's raining.

This is not due to anything in the intrinsic nature of thinking itself. Rather, it's the result of the application of Jones's theory to oneself coming to be automatic and second nature. Jones's contemporaries, like us, need only to become habituated to apply the theory to themselves in a way that subjectively does not seem to rely on any inference or self-observation.<sup>25</sup>

Sellars typically describes this development in terms of the historical development of the human conceptual repertoire (e.g., EPM §63). That makes sense given that his primary concern is generally how that conceptual repertoire could have arisen. And such historical development would arguably suffice to explain how we come to have the conceptual repertoire to talk and think about intentional states, since that arguably gets passed along from one generation to the next as part of our intellectual heritage.

And it sometimes seems that Sellars simply assumes that the ability individuals have to make subjectively unmediated first-person reports of intentional states will—"need it have?"—come along for the ride. But the historical development of the conceptual repertoire cannot by itself suffice for an individual to be able to self-ascribe intentional states in a subjectively unmediated way, since that is not something one could pick up from one's adult linguistic environment. And Sellars tends to leave the acquisition of that ability with his frustratingly uninformative 'need it have?'.<sup>26</sup>

But though it is seldom noted by those who discuss this aspect of Sellars's views, he did on one occasion specifically adapt his historical story to the psychological development of the individual (see SK lecture II, especially §§14–16). And construing the developmental story about concept acquisition as applying to individuals makes room in turn for the account sketched several paragraphs back of how each individual comes to make subjectively unmediated self-ascriptions of intentional states.

This is all thus far about the ability to make subjectively unmediated reports of intentional states. But Sellars gives a parallel story for sense impressions. Jones's theory recategorizes the manifest redness of physical objects to the mental qualities of sense impressions; so training in that aspect of Jones's theory is needed to report colors thus recast as mental qualities. With that training, Jones's contemporaries come to be able

<sup>25</sup> I develop this point in more detail in Rosenthal (2005), chapters 2 and 10, especially pp. 301–5; and in (2008: §5).

<sup>26</sup> Sellars told me (personal communication) that the ability to come to self-ascribe independent of observation was due to neural endowment, and that the 'need it have?' meant only that it is a contingent matter that we possess that neural endowment. Doubtless some neural endowment subserves one's coming to be able to report one's own intentional states in a subjectively unmediated way. But it's unclear what neural endowment would make one's learning Jones's theory in an exclusively behavior-based way issue in one's actually making such subjectively unmediated self-ascriptions. So by itself the appeal to neural endowment strikes me as unsatisfying.

to “say ‘I have the impression of a red triangle’ when, and only when, according to the theory, they are indeed having the impression of a red triangle” (EPM §62).

But if the *esse* of sense impressions is *sentiri*, why is any training needed for one to be able to report such states? Why doesn’t the *esse*’s being *sentiri* for sense impressions by itself imply that it is in the intrinsic nature of sense impressions that we are automatically aware of them, and accordingly able to report them in a subjectively unmediated way?

Sellars would reply that pre-Joneseans do not, in advance of learning Jones’s theory, have the concepts needed to report their sense impressions, conceptualized as sense impressions. So as already noted, Sellars view does result in sense impressions’ being invariably conscious. But in advance of one’s learning Jones’s theory, sense impressions will not be conscious as sense impression. Mental qualities are manifest perceptible properties correctly recategorized as the mental qualities of sense impressions. So sense impressions are conscious even for pre-Joneseans, despite pre-Joneseans’ conceptualizing them as manifest perceptible properties.

### 3. Quality-Space Theory

Our concept of visual impressions derives from concepts that apply to perceptible objects. But the way they derive is pivotal for understanding Sellars’s account of sense impressions and indeed, I believe, for any correct theory of mental qualities. Sellars writes:

The essential feature of the analogy is that visual impressions...resembl[e] and [differ]...[in ways] structurally similar to the ways in which the colours and shapes of visible objects resemble and differ. (EPM, §61 [3])<sup>27</sup>

On this account, mental qualities are individuated by appeal to their relations of similarity to and difference from other mental qualities in the relevant family of mental qualities. The similarities and differences reflect those that hold among the corresponding perceptible properties of physical objects. So on this view we do not determine what qualitative type each mental quality is on its own, by appeal to the way it subjectively appears by itself in conscious experience. Rather, the type a token mental quality belongs to is determined by the similarities and differences that token bears to tokens of other mental-quality types in the relevant family.

This goes directly against a currently widespread view of mental qualities, on which we taxonomize each mental quality token solely by the way it appears to us subjectively.

<sup>27</sup> Cf. BBK §26: “[T]he various species of visual sensation form a family of resemblances and differences which corresponds to the family of resemblances and differences which is the system of sensible qualities in the basic sense, the sense which pertains to material things. It is in this way that the isomorphism of acts of sense and material things is to be understood. The place of *derivative white* and *derivative triangular* in the system of the species of sense acts is isomorphic in the *structural* sense... with the place of *basic white* and *basic triangular* in the system of the perceptible qualities of material things.”

But taxonomizing in Sellars's relational way more accurately reflects how we consciously experience things. We are seldom consciously aware of the colors of things with any fineness of grain unless we compare those colors to others that are relatively similar.

This relative taxonomizing is especially striking in the greater ability we have to discriminate very close colors when they're presented simultaneously than when they're presented one after another, even in very quick succession.<sup>28</sup> If one is presented with several close shades of red in quick succession, one will seldom if ever be able to tell whether they are the same, though if presented simultaneously with the very same shades it is easy to tell. We distinguish hues more finely when other nearby hues are available for comparison. Even introspective awareness taxonomizes mental color qualities in a relative way, not atomistically.

The atomistic view of how we taxonomize mental qualities is implicit in the idea that the mental quality you have on seeing a red object could be the same as the mental quality I have on seeing a green object, without any way to determine whether that is ever actually the case. As noted in section 1, such undetectable inversion would be possible only if the only way to determine a mental quality's type is by the way it subjectively appears to particular individuals in consciousness. Indeed, undetectable inversion is not even conceivable unless first-person, subjective access to mental qualities, one by one, is the only way to type mental-quality tokens. And atomistic taxonomizing of mental qualities also goes hand in hand with regarding subjective, first-person access as authoritative about mental qualities, since first-person access seems to be limited to the way each mental quality subjectively appears on its own.

Such undetectable inversion is, moreover, now widely held to be at least conceivable, though this is typically cast as simply a brute intuition, not needing supporting argument. But since undetectable inversion is conceivable only on an atomistic, consciousness-based taxonomy of mental qualities, we can safely take that view about taxonomizing to underlie currently prevailing views of mental qualities. Sellars's account of mental qualities, which instead taxonomizes mental qualities by appeal to similarities and differences, is a salutary and much needed corrective to those prevailing views.<sup>29</sup>

The similarities and differences among mental qualities that Sellars appeals to are isomorphic to perceptible similarities and differences among corresponding properties of objects. So appeal to similarities and differences among mental qualities spells out how our concepts for sense impressions derive from those for perceptible objects. But this aspect of Sellars's account is independent of whether those sense impressions cannot occur without being conscious. Indeed, it is notable that the only intrinsic properties that Sellars explicitly describes Jones's theory as ascribing to sense impressions pertain to the similarities and differences (EPM §61 [2]). It is just the relocation

<sup>28</sup> e.g., Halsey and Chapanis (1951); Pérez-Carpinell et al. (1998); and Raffman (2011: §§5.4–5.5, pp. 116–21).

<sup>29</sup> For more about the contrast between a first-person-only view of mental qualities and a view along the lines of Sellars's, see Rosenthal (2010).

story that commits him to holding that the relocated mental qualities are invariably conscious, since relocation involves perceptible properties only as they are manifest to us, that is, only as we are consciously aware of them in perception.

By itself, Sellars's account of mental qualities in terms of similarities and differences makes no appeal to relocation or to consciousness. Mental qualities are typed by appeal to a set of similarities and differences that reflect the similarities and differences we perceive physical objects to have. But perceiving sometimes occurs without being conscious, as in subliminal perceiving. And such nonconscious perceiving captures all the similarities and differences that conscious perceiving can capture.

There is ample experimental evidence for this. One source has to do with experimentally degrading stimuli to the point at which individuals take themselves merely to be guessing about similarities and differences among the degraded stimuli. And guessing is reasonably taken to indicate that one is not consciously aware of the similarities and differences one is guessing about. Nonetheless, the guesses about those similarities and differences remain strikingly accurate.<sup>30</sup> So this is a case of fine-grained discriminative perceiving that isn't conscious.

Indeed, even when a person reports two stimuli to be the same, so that they're consciously indistinguishable, when the person is pressed to guess, their accuracy in guessing whether they are the same remains well above chance. And as stimuli become more degraded and so more difficult to discriminate, subjects' confidence in their judgments diminishes far more rapidly than the accuracy of their judgments and guesses. Evidently the conscious guesses reflect accurate perceptual judgments, though judgments that aren't conscious.

So we can rely on perceptual discrimination independent of whether it's conscious, and not be limited to conscious perceptual discrimination. Taxonomizing mental qualities by similarities and differences is independent of the mental qualities' being conscious. So such taxonomizing is independent of the relocation story, with its implication that mental qualities are invariably conscious.

It's useful to consider a concrete case. We can use a person's reports about whether two colors match or are just noticeably different<sup>31</sup> to construct a quality space of colors that reflects the similarities and differences among color stimuli that the person can perceive. This quality space captures the discriminative ability of a particular person with respect to perceptible colors, in respect of hue, saturation, and brightness. Averaging over people, we get a quality space that reflects the discriminative abilities of people generally in respect of perceptible colors.<sup>32</sup> I'll refer to this account of mental

<sup>30</sup> e.g., Cheeseman and Merikle (1986), and Dienes and Seth (2010).

<sup>31</sup> On the notions of two qualities' matching or being just noticeably different, see Goodman (1951: 222–6 and 256–8). Goodman argues convincingly that we can better handle the lack of transitivity of just noticeable differences by determining whether subjects take two stimuli to match, rather than whether they are just noticeably different. But that issue isn't relevant to the present discussion.

<sup>32</sup> e.g., the color space is that constructed by the Commission Internationale de l'Éclairage (CIE) (1960/1932).

qualities by appeal to quality spaces constructed from discriminable similarities and differences as quality-space theory (QST).

This discriminative perceptual ability does not rely on conscious perceiving. So we need not conceive of sense impressions and the mental qualities that characterize them as invariably conscious. We can conceive of mental qualities simply as those mental properties in virtue of which we can discriminate among the relevant perceptible properties, whether consciously or not. Whenever we do discriminate two perceptible properties, it must be that we are in states that differ in a way that corresponds to the difference between the discriminated perceptible properties. And given an entire family of discriminable similarities and differences among perceptible properties accessible by a particular modality, we must be able to be in states that resemble and differ in corresponding ways. Sense impressions are simply the states in virtue of which we are able to discriminate among perceptible properties such as colors.

So the quality space that reflects the differences among perceptually discriminable properties by itself fixes a quality space of sense impressions that enable those discriminations. It's not that we compare the quality space of perceptible properties with the quality space of mental qualities and note that they're isomorphic.<sup>33</sup> Rather, we extrapolate from the quality space of perceptual discriminations to an isomorphic quality space of the mental qualities that enable those discriminations.

This isomorphism of quality spaces, moreover, underlies the way Sellars sees our concepts of sense impressions as "analogical extensions of concepts" for the perceptible properties of physical objects (BBK §24). The isomorphism is that in virtue of which sense impressions "resembl[e] and [differ]... [in ways] structurally similar to the ways in which the [perceptible properties of perceptible] objects resemble and differ" (EPM §61 [3]).

This explains how our concepts of sense impressions derive from and depend on our concepts of the perceptible properties of physical objects. How about the other half of the picture, the ontological dependence Sellars sees of manifest colors, for example, on sense impressions of color? Do we, as he claims, "project or transpose the attributes of sense impressions [of color] into the categorial framework of physical things and processes" (SRII V §57)? That's the relocation story, which unlike the isomorphism of quality spaces, carries with it the implication that sense impressions are intrinsically conscious.

Relocation is the priority in the order of being Sellars sees of sense impressions over perceptible properties; the analogy is his priority in the order of knowing of concepts for perceptible properties over concepts for mental qualities. And because perceptual discrimination can determine a quality space without the perceiving's being conscious, the analogy is independent of relocation.

<sup>33</sup> In that case, the mental qualities might arguably have to be conscious to enable such comparison of quality spaces. But QST relies on no such comparison.

But the temptation to adopt that relocation picture, and hence the claimed ontological priority, rests on conceiving of the physical colors of things as they consciously appear to us. Independent of conscious perceiving, properties such as colors and sounds are simply wave phenomena. It is such wave phenomena that we perceive, and independent of their being consciously perceived nothing about them resists mathematical treatment. Since the perceiving that grounds the analogy between sense impressions and perceptible properties need not be conscious, there is no reason to conceive of physical colors as projections from sense impressions.

We think about and taxonomize proper sensibles such as colors and sounds by appeal to their location in the relevant quality spaces. And these quality spaces depend on our human discriminative abilities. But the physical properties we perceive and discriminate among do not depend for their existence on being perceived. Those properties occur independent of us, wave mechanical phenomena in the cases of color and sound and the chemical stimuli in the cases of taste and olfaction. The way we taxonomize those properties perceptually hinges on how we discriminate among them, but their existence does not.

Once we acknowledge the occurrence of perceiving that isn't conscious, we needn't conceive of perceptible properties as they consciously appear to us. And then these properties are no more problematic for the scientific image than any other physical properties. We can join Sellars in insisting "that in the dimension of describing and explaining the world, science is the measure of all things, of what is that it is, and of what is not that it is not" (EPM §41), but still comfortably be color and sound realists, countenancing such physical proper sensibles in terms of their typically unperceived natures. And though we can taxonomize these physical properties as physics does, we can also taxonomize them by appeal to our human discriminative abilities, discrimination that need not be conscious.

Perceptible colors in the scientific image are spectral-reflectance profiles, and the manifest image knows nothing of spectral reflectances. Does this mean that the colors of the manifest image must, after all, be colors as they consciously appear to us?<sup>34</sup> And then must the analogy of how we conceive of sensations with how we conceive of perceptible properties imply, despite the foregoing, that we must after all conceive of sensations as intrinsically conscious?

The colors of the manifest image are whatever physical properties of visible objects enable us to discriminate among those objects in respect of color. It turns out that those properties are spectral-reflectance profiles; it is such spectral reflectance that enables discrimination in respect of color. But for the purposes of the manifest image, it doesn't matter what those properties are; they are simply the visible physical properties of objects. It is those properties that we discriminate, whatever their nature according to physics. And since such discrimination need not be conscious, neither the way the manifest image conceives of the visible colors of objects nor the analogy of how we

<sup>34</sup> I am grateful to deVries for forcefully pressing this concern in correspondence.

conceive of sensations of color with how we conceive of perceptible color implies that such sensations are intrinsically conscious.

Sellars insists that “any solution [to the mind-body problem] . . . which fails to preserve the conceptual space of color, sound, taste, etc., suitably transposed, has lost touch with rather than solved the problem” (IAMB §48).<sup>35</sup> The current account satisfies Sellars’s demand. We conceive of the colors and other proper sensibles in terms of our ability to discriminate those properties, and hence in terms of their similarities and differences relative to our perceptual abilities. And we conceive of sense impressions as states that enable those perceptual discriminations, and hence also in terms of relative location in a quality space of similarities and differences. Both conceptions “preserve the conceptual space” of the relevant properties.

One might insist that the “preserv[ing] of the conceptual space” Sellars has in mind pertains only to conscious sense impressions. And he may well have thought of things that way, since he regarded qualitative states, in keeping with many traditional and current views, as intrinsically conscious. But though Sellars did accept this traditional view, he nowhere describes it as part of what it is “to preserve the conceptual space” of the proper sensibles or their analogue mental qualities.

As noted in section 1, Sellars writes that “sense impressions . . . are common sense theoretical constructs introduced to explain the occurrence not of white rat type discriminative behavior, *but rather of perceptual propositional attitudes. . .*” So these common-sense posits are “bound up with the explanation of why human language contains . . . words for perceptible qualities and relations” (IAMB §48). And slightly later he refined this view somewhat to hold that the “primary purpose [of positing sense impressions] is to explain the occurrence of certain [‘minimal’] *conceptual* representations in perceptual activity” (SM I §42; see n. 12).

The quality-space account sketched here satisfies these constraints. It does not appeal to discriminative behavior, but to perceptual discriminations, whether conscious or not, from which we can construct quality spaces of discriminable similarities and differences. Those discriminations are revealed in judgments, also whether conscious or not, about pairwise just noticeable differences between stimuli. Those judgments, moreover, are perceptual propositional attitudes, and the minimal conceptual representations that Sellars holds in SM figure in perceiving would figure in such judgments, which themselves can occur without being conscious. And as noted earlier, when individuals guess accurately in discriminating degraded stimuli, those guesses must reflect perceptual propositional attitudes that are not conscious. The methodology for constructing quality spaces of discriminable properties rests on perceptual judgments that need not be conscious.

<sup>35</sup> Cf. his claim that in solving the mind-body problem, “[t]he logical space of sense impressions would, so to speak, have been transposed into a new key and located in a new context” (IAMB §45). As deVries puts it, the logical space of color sense impressions must preserve “the logic of colour space” (deVries 2005: 241).

Still, the feeling may linger that something has been lost. What about the way physical colors appear to us when we do perceive them consciously? In those cases, our sense impressions are conscious, and we must somehow account for what it is for them to be conscious. Since the appeal to the perceptual similarities and differences captured by quality spaces does not require sense impressions to be conscious, it cannot by itself explain what gives rise in the conscious cases to conscious subjectivity. Sense impressions exhibit such subjectivity only when they are conscious; so if sense impressions are not intrinsically conscious, what explains their sometimes being conscious? What is it that does result in these conscious seemings?

As noted in section 1, no state, whether an intentional state or a sense impression, is conscious if one is wholly unaware of it. Being wholly unaware of a mental state one is in is a decisive mark that the state is not conscious. So a state is conscious only if one is in some way aware of it, aware of it in a way that seems subjectively to be unmediated. We can call such subjectively unmediated awareness of being in a mental state a higher-order awareness (HOA).

As also noted earlier, the subjectively unmediated aspect of HOAs is the upshot of Sellars's "need it have?" parenthetical in EPM: "[I]t now turns out—need it have?—that [Jones's contemporaries] can be trained to give reasonably reliable self-descriptions, using the language of the theory, without having to observe [their] overt behaviour" (§59). Once Jones's contemporaries need no longer rely on self-observation, their application of Jones's theory to themselves comes to seem subjectively unmediated.

Reports of one's own mental states reflect awareness of those states. But we can go farther. Such reports, like all sincere speech acts, express intentional states that have the same content as those reports (e.g., EPM §§56–9, NI in PPME ¶¶4–9). If one sincerely says that it's raining, one thereby verbally expresses one's thought that it's raining.<sup>36</sup> So in reports that one has a thought one expresses a further thought that one has the thought one reports; reporting a thought requires that one have a thought about the thought one reports, a higher-order thought (HOT). The HOAs in virtue of which we're aware of our conscious thoughts are HOTs (see Rosenthal 2005: chapter 2).

As noted in section 2, Sellars explains in a parallel way how we come to be aware of ourselves as having sense impressions. Indeed, Sellars requires such a story, since without Jones's theorizing about sense impressions we wouldn't come to have the conceptual resources to be aware of sense impressions as sense impressions. For such states to be conscious specifically as sense impressions, we need HOAs about them that conceptualize them as sense impressions. A higher-order account of what it is for a mental state to be conscious is needed for sense impressions no less than for intentional states. And

<sup>36</sup> Sincerity is crucial here: To express an intentional state, a report or other speech act must be sincere and nonparroting. A lie or other insincere speech act has semantic meaning that fails to correspond to the content of any intentional state the speaker is in, and parroting speech is a rote production of verbiage, unrelated to anything the speaker thinks. For more, see Rosenthal 2005, chapter 3 §5, and postscript.

for the HOAs to conceptualize the relevant states as sense impressions, those HOAs must have intentional content; they must be HOTs.

One might doubt whether HOTs can be responsible for making perceptual sensations conscious; how can HOTs, which are purely intentional states and so themselves have no qualitative character, give rise to the conscious qualitative character of conscious perceptual states? But there is reason to think that they can.

Strikingly, there are cases in which simply learning new words for one's perceptual sensations can result in more fine-grained conscious experiences. This can happen, for example, with people inexperienced in wine tasting. One samples two wines and finds they are subjectively indistinguishable. Sometimes, then, when one is given a new word for one of the two, a word with no prior semantic associations, one finds on sampling the two again one now has taste conscious sensations that differ slightly.

How can simply learning new words for one's sensations result in being aware of those sensations in a more fine-grained way? Learning new words enables the having of new thoughts, in this case new thoughts about one's sensations; these new HOTs make one aware of one's sensations in new ways.<sup>37</sup> The best explanation, indeed probably the only explanation, of how learning new words for one's sensations occasionally results in more fine-grained subjective experiences is that the resulting HOTs themselves result in that difference in how one is subjectively aware of one's sensations. And we can generalize from this to the conclusion that HOTs are responsible for all cases of subjective awareness of sensations. HOTs do make the difference between sensations' being conscious and their not being conscious.

Where does all this leave us with sense impressions, manifest perceptible properties, and relocation? Sellars holds that our concepts of sense impressions of color derive from concepts for manifest-image perceptible colors. But on his view, the physical perceptible colors are themselves projections from conscious color sensations. His theory bans colors from the physical realm, relocating them to the mind as sense impressions of color.

This is understandable as long as we think of perceptible colors as we perceive them consciously. But when we perceive colors subliminally, and hence not consciously, there is nothing problematic about the colors; so they don't then exhibit the conscious qualitative character that resists physicalist treatment, which they seem to have when we see them consciously. They are simply wave-mechanical phenomena.

Conceiving of colors as we see them independent of whether the seeing is conscious does not prevent us from explaining the way colors manifest themselves to conscious visual perception. But that explanation won't appeal to anything about the intrinsic nature of the colors or of color sensations. Rather, we'll appeal to the way we're subjectively aware of our color sensations, sensations that also sometimes occur without our being aware of them, and hence without being conscious.

<sup>37</sup> This type of occurrence is rare in adulthood, but it likely happens often in young childhood, even before children deploy those learned words in their own speech.

I noted in section 1 that a seldom noticed cost of the relocation story is that it threatens to treat the spatial properties of size, shape, and location differently from proper sensibles such as color, since there's plainly nothing about those spatial properties that resists treatment in physical terms. The problem is that we sense size, shape, and location only as boundaries of proper sensibles, so that any account of mental qualities that pertain to spatial properties must fit with the account we give of mental qualities that pertain to proper sensibles. We will want a uniform account of mental qualities pertaining to proper sensibles and those pertaining to their boundaries.

As noted in section 1, Sellars stresses this very point. The geometrical and content properties of perceptible objects must go together in sensing (SR II ¶54; PHM II, ¶37, SPR 75 n.). Indeed, that's of a piece with his insistence that in Jones's theory perceptible physical objects are the basis for the analogy that allows the positing of sense impressions—the wafers of EPM (§61; cf. ATS)—since the size, shape, and location of physical objects all are visible as boundaries among colors.

QST readily provides the desired uniform account. A sensation of a red triangle exhibits a mental quality of color that resembles and differs from other such qualities in ways isomorphic to the discriminable similarities and differences that physical redness has from the other perceptible physical colors. And the same type of account holds for the triangular aspect of a sensation of a red triangle. The mental qualities of shape, size, and location resemble and differ from other mental qualities in their families in ways that are isomorphic to the discriminable similarities and differences among the relevant physical spatial properties.

In both cases, the perceptible properties are fixed by relative discriminability. And that provides a uniform treatment of mental color qualities and the mental spatial qualities that we are aware of as boundaries among those mental color qualities. We conceive of both by analogy with relevant similarities and differences among perceptible properties. So there is no greater need to relocate physical colors than to relocate visible spatial properties. And it will turn out that a satisfactory account of the mental qualities that pertain to spatial perceptible properties will be pivotal when we turn in the next section to Sellars's grain problem.

The connection Sellars sees between sensing proper sensibles and sensing spatial properties not only holds in the manifest image, but can also carry over to the scientific image. So long as we do not conceive of sense impressions as intrinsically conscious, we won't lose the conceptual space of sense impressions of spatial or proper sensibles by identifying them with neural occurrences. A taxonomy in neural terms will not, of course, preserve that conceptual space. But we can also taxonomize the neural states in respect of Jones's analogy with discriminable similarities and differences, and that will preserve the desired conceptual space. There is no need to taxonomize the neural states only in respect of their neural properties.

Jones succeeds in getting his contemporaries to self-ascribe both thoughts and sensations independent of the theory, and their doing so implies the occurrence of HOTs

about the states reported, HOTs in virtue of which the states are conscious. But such states could presumably occur without any HOTs, and so without being conscious.

This points to a tension in Sellars's way of thinking about mental states' being conscious. The acquisition by Jones's contemporaries of the ability to report independent of the theory suggests that what it is for thoughts and sensations alike to be conscious is that one is aware of them in a suitable way. But Sellars's adoption of a version of the relocation story commits him to holding that sensations are intrinsically conscious. So it's not obvious that Sellars took the property of a sensation's being conscious to consist in being aware of oneself as having the sensation.<sup>38</sup> And independent of that, the evidence seems compelling that Sellars was indeed committed to the intrinsic consciousness of sense impressions.<sup>39</sup> It is unclear that Sellars ever squarely faced this tension in his thinking about what it is for a state to be conscious.

QST allows for mental qualities to represent perceptible properties, though such representation differs in crucial ways from representation by states with intentional content. Each mental quality enables one to discriminate a perceptible property from its nearly indiscriminable neighbors. So it is reasonable to regard each mental quality as representing the perceptible property that the quality in question allows one to discriminate.

The representational character of intentional states, by contrast, can be expressed by speech acts, whereas sensations and mental qualities cannot be verbally expressed. Saying that there's something red over there does not express one's sensation of red, but rather one's thought that there's something red over there. Sensations represent in virtue of their mental qualities and thoughts in virtue of their intentional content, but they are distinct types of representing.

When one perceives a red triangle, one's perceptual state exhibits both mental qualities of red and triangularity and the intentional content that there is a red triangular object. But how do the mental qualities and intentional content operate together in a single perceptual state? Representation by mental qualities enables us to explain that. A sense impression of a red triangle represents a red triangular shape. Consider then a creature with the conceptual repertoire needed to conceptualize objects as having the perceptible properties that sense impressions represent. Having a sensation of a red triangle will automatically dispose such a creature to conceptualize the thing the sensation represents, and to conceptualize that object as being red and triangular.<sup>40</sup>

So having a sensation with mental qualities of red and triangularity will prompt the creature to have a thought to the effect that there is a red, triangular object relevantly in

<sup>38</sup> Even a view, such as Brentano's, on which the HOA in virtue of which a state is conscious is intrinsic to that state, does not automatically preclude the state's occurring without that intrinsic HOA.

<sup>39</sup> I argued in §2 that a sensation would be conscious if one were aware of it though not aware of it as a sensation. That issue is moot if Sellars is operating with a notion of a sensation's being conscious that does not consist in one's being aware of oneself as having that sensation.

<sup>40</sup> It won't on that account dispose the creature to conceptualize the sensations or its mental qualities. For one thing, pre-Jonesean creatures won't have the concepts required to do so. For another, the creature's natural concern will typically be only with the thing the sensation represents, not with the sensation itself.

front of it. The strong disposition for such a thought to occur given the occurrence of such a sensation explains how the intentional content and qualitative character of perceiving operate together, forging the needed tie between qualitative character and intentional content. This disposition depends on the representational character that mental qualities have, though that representational character is different in nature from that of intentional content.

Sellars occasionally speaks of “ways in which conceptual representations of colour and shape can resemble and differ” (SM I, §44). Plainly our concepts of colors and shapes must reflect the perceptible similarities and differences among them. But Sellars’s remark might suggest something stronger, that the QST described here can explain not just the qualitative character of sense impressions, but also how concepts represent color and shape.

But QST cannot do that work. QST requires discrimination of perceptible properties in a particular family, for example, a family of colors or of sounds. We can fix the relevant families by appeal to distinct sensory modalities, so that perceptible colors, for example, are visible properties the visible boundaries of which determine visible spatial properties. The specific types of mental color qualities are then fixed by their relative location in a corresponding quality space of discriminable colors. Similarly for the other sensory modalities.

So the quality spaces that describe relative discriminability of families of perceptible properties and thereby the corresponding families of mental qualities are relative to perceptual modalities. These families of properties are closed, in that the perceptual capacities of an individual determine what properties occur in each quality space. By contrast, concepts are not relative to perceptual modalities, and so are not fixed by closed families of properties. Rather, they bear promiscuous conceptual relations to a plethora of concepts belonging to families of many sorts. QST cannot provide a satisfactory account of conceptual representation or intentional content.<sup>41</sup>

Sellars presents Jones’s theory of sense impressions as relying on colors as they consciously appear to us, that is, how they appear when we see them consciously. And the perceiving he describes in the manifest image is always conscious. Indeed, it’s tempting to think of the manifest image in terms of things’ being consciously manifest to us. But all this is arguably due simply to his adoption of the relocation story, with its attendant implication that sense impressions are invariably conscious.

And apart from the connotation of ‘manifest’, it’s hard to see why the manifest image wouldn’t readily accommodate subliminal perception, nor why Jones’s theory of sense impressions would need to rely exclusively on conscious perceiving. People plainly do in everyday life sometimes perceive things nonconsciously; they say they didn’t see a

<sup>41</sup> See Rosenthal (2005: 207–8, and §6 *passim*).

Because mental qualities represent in a way different from intentional content, QST is not a type of representationalism or intentionalism, on which perceptible properties are represented solely by way of intentional content. For representationalist views, see, e.g., Harman (1990) and Byrne 2001.

particular thing, though their behavior reveals that the relevant visual information functions psychologically in them.

Sellars does say that the manifest image, “by stipulation, . . . does not include . . . the postulation of imperceptible entities . . . to explain the behaviour of perceptible things” (PSIM II ¶18, SPR 7, ISR 375). And sense impressions are not perceptible. But they also are not entities; rather, they are states of entities.<sup>42</sup> They are states of persons, and persons are among the basic entities of the manifest image.

Jones’s theory, moreover, is no less compelling as an account of how we come to think of ourselves as having sense impressions if it is neutral as between conscious and nonconscious perceiving. Nonconscious discrimination is responsive to perceptible colors. Jones posits sense impressions to explain perceiving that occurs in the absence of the things the perceptions are about. And those perceptions may themselves not be conscious. So thinking of ourselves as having sense impressions could have gotten its start in positing sense impressions that are not conscious.

#### 4. Grain and Analogy

The difficulties Sellars sees sense impressions as posing all derive, I have argued, from construing their distinguishing mental qualities as intrinsically conscious. This, I urged, is in turn a consequence of the relocation story about mental qualities, an especially subtle version of which Sellars endorses. But there is an alternative account of mental qualities, developed in section 3, which preserves the spirit and much of the letter of Sellars’s own account but avoids the relocation story and hence the commitment to mental qualities’ being intrinsically conscious.

More specifically, I have argued that though Sellars is right to claim that concepts of perceptible properties are conceptually prior to concepts of sense impressions, the ontological priority he saw of sense impressions over perceptible properties is mistaken. And I have argued that we can reject that ontological priority while retaining the central part of Sellars’s account of sense impressions in terms of similarities and differences (EPM §61 [2–3]), and that this account, detached from the ontological priority is correct and penetrating. In this concluding section I’ll argue that detaching the claim of ontological priority from the rest of Sellars’s views about sense impressions also enables us to avoid the vexing difficulties about sense impressions that Sellars wrestled with.

The principal difficulty Sellars saw for sense impressions is the so-called grain problem. Manifest perceptible colors appear in conscious perceiving to be ultimately homogeneous, as do the corresponding conscious mental color qualities. But nothing in the scientific image is ultimately homogeneous. How can this apparent disparity between manifest and scientific images be reconciled?

<sup>42</sup> O’Shea (2012) usefully stresses this distinction, for example in footnote 9.

There have long been exegetical issues about Sellars's grain problem, often tied to other issues of Sellars interpretation. I take for granted here a relatively centrist construal, on which Sellars describes the grain problem as "essentially the same" as Eddington's classic two-table puzzle (PSIM VI ¶102, SPR 35–6, ISR 404). And I'll argue that the difficulty is dissolved by adjusting Sellars's appeal to similarities and differences to accommodate sense impressions that aren't conscious.

In PSIM Sellars asks, "[C]an we define, in the framework of neurophysiology, states which are sufficiently analogous in their *intrinsic* nature to sensations to make . . . identification [with neural states] possible?" "The answer," he continues, "seems clearly to be 'no,' because of the ultimate homogeneity of 'the perceptible qualities of things,' which neural systems lack."<sup>43</sup> "[C]olour expanses in the manifest world consist of regions which are themselves colour expanses," however tiny those subregions may be (PSIM VI ¶99–100, SPR 35, ISR 403).<sup>44</sup> It is such ultimate homogeneity of mental qualities that leads Sellars to insist that in any solution to the mind-body problem "[t]he logical space of sense impressions would . . . have been transposed into a new key and located in a new context" (IAMB VI §45).

A property is manifest when one is aware of it. But properties in the manifest image plainly also occur when nobody is aware of them, and manifest-image objects have perceptible natures independently of those objects' being perceived, whether consciously or not. Nor do manifest-image objects always have the properties they appear to have, as Sellars stresses (e.g., EPM §14) and many visual illusions attest. An especially striking case is Benham's disk, which has only black and white patterns on it, but appears when spun to have chromatic colors, sometimes different colors for different observers. Appearance differs from reality within the manifest image, and perception that is not conscious may be inaccurate no less than conscious perceiving.<sup>45</sup>

It's compelling pretheoretically to think that visible colors are ultimately homogeneous because they consciously appear to be, and conscious appearances play a large, often decisive role in determining our pretheoretic views. And independent of the way we consciously see colors, there is nothing about the notion of a property's being visible that suggests ultimate homogeneity. And if we rely on that pretheoretic sense about colors and go on to adopt the relocation story, the appearance of ultimate homogeneity will carry over to mental qualities of color. The relocation story trades on the way we consciously perceive, and so would transfer everything about the way we consciously

<sup>43</sup> Cf. IAMB (IV ¶37): The "objection [that] goes to the heart of the matter [is] 'How . . . can a property which is in the logical space of neurophysiological states be identical with a property which is not?' Otherwise put, 'How could a predicate defined in terms of neurophysiological primitives have the same use as (be synonymous with) a predicate which is not?' To this question the inevitable answer is 'It could not'"

<sup>44</sup> Cf. Goodman's notion of a predicate's being "dissective" if it is true of every part of every individual of which it is true (1951: 48).

<sup>45</sup> On Benham's disk, see, e.g., Grunfeld and Spitzer (1995). On erroneous nonconscious perceiving, see, e.g., Harris et al. (2011), and Bressler (1931).

Simultaneous-contrast effects offer another useful example; here color stimuli appear to have strikingly different hues depending on what color stimuli are immediately adjacent. This effect is known to occur in early visual processing, and so in all likelihood independent of conscious awareness.

see visible colors to mental qualities of color, presumably including the appearance of ultimate homogeneity. And the relocation story aside, introspection by itself also suggests that mental color qualities are ultimately homogeneous.

But since we distinguish within the manifest image between perceptual appearance and reality and the way manifest-image objects appear to us is sometimes illusory, we cannot rest with how perceptible colors consciously appear to us. Perhaps the appearance of ultimate homogeneity is an illusion that does not reflect the reality of visible colors. The relocation story does cast the nature of sense impressions in terms of perceptible properties as they appear consciously, and so would carry the apparent ultimate homogeneity of colors as we consciously see them over to the corresponding sense impressions. But we have seen reason to mistrust the relocation story and the inferences it delivers about the nature of sense impressions.

Sellars would doubtless resist these cautionary remarks. His commitment to the relocation story leads him to see perceptible physical colors as projections of the mental color qualities of visual sense impressions, and so to regard mental qualities of color as prior in the order of being to the perceptible colors of physical objects. So questioning whether ultimate homogeneity is a real property of perceptible physical colors as against mere appearance gets things backward on Sellars's view, by ignoring his claim of ontological priority for the mental color qualities of visual sense impressions.

I've argued that this ontological priority is mistaken; we can and should be physical color realists. Physical colors are simply spectral-reflectance profiles that we taxonomize by appeal to the discriminative perceptual abilities of humans or other creatures. But our taxonomizing these spectral-reflectance properties in that way does nothing to undermine their status as real properties, which exist independent of sentient beings. Perceptible colors are not ontologically dependent on being perceived or on the sense impressions that occur in perception. And if perceptible colors are not projections of sense impressions, we can ask whether those physical colors are in reality ultimately homogeneous, independent of what we then go on to say about sense impressions. And we have no reason to think that they are.

But Sellars's worry is in any case not primarily that perceptible colors are ultimately homogeneous, but that the mental color qualities of visual sense impressions are. That's what he takes to cause difficulties. So independent of perceptible physical colors, we must determine whether mental color qualities are in their very nature ultimately homogeneous.

And in doing this we must set aside introspective appearances. Introspective awareness of sense impressions of color does arguably represent mental color qualities as ultimately homogeneous. But introspection by itself cannot guarantee that it is accurate about mental color qualities as they are in reality. That is something we must determine independently of introspection, though when we have done so it will be useful to revisit the introspective appearances.

Some will see setting aside introspection as misguided. If one takes being conscious to be part of the intrinsic nature of sense impressions, then perhaps their true nature is

as consciousness represents it to be. Sense impressions, some will insist, are simply forms of consciousness; so there can be no wedge to drive between how sense impressions introspectively appear and how they are in themselves.

But as noted in section 2, this is a mistake; consciousness can and sometimes does misrepresent the mental states we are in. And even the idea that being conscious is intrinsic to sense impressions cannot preclude such misrepresentation. A sense impression's being conscious is a distinct property from whatever other mental properties the sense impression may have.<sup>46</sup> So even if being conscious is intrinsic to sense impressions, the way they are conscious need not accurately reflect their other mental properties. Since introspection and consciousness are not always accurate about the mental properties they represent, we cannot assume that the introspective impression that mental color qualities are ultimately homogeneous is accurate about the true nature of those mental qualities.

The occurrence of subliminal perceiving reinforces this concern. Sense impressions occur without being conscious at all, and we have no independent reason to think that subliminal sense impressions are ultimately homogeneous, nor that sense impressions that aren't conscious are ultimately homogeneous simply because conscious sense impressions appear to be.

When we cannot reliably settle a question just by appeal to the appearances alone, we must often turn to a suitable theory of the phenomena under consideration. Since subjective impressions cannot settle the question about ultimate homogeneity, what's needed is a suitable theory, in this case a theory of mental color qualities. So we should turn here to QST, based on Sellars's appeal to similarities and differences but without the relocation story, to tell us whether mental color qualities are in their nature ultimately homogeneous.

A sense impression of color is ultimately homogeneous if every mental part, however small, itself exhibits some mental color. So we must have a grasp of what it is for mental expanses of mental color to have mental parts. A mental quality of an expanse of color is fixed by boundaries between one mental color quality and contrasting mental color qualities. And we conceive of those mental boundaries by analogy with the visible physical boundaries among visible physical colors.

As noted earlier, QST readily spells out the relevant analogy. To recap, a sense impression of a red triangle exhibits a mental color quality fixed by its relative position in the mental-color quality space. And the mental color quality of red that the sense impression exhibits has its mental triangular shape in virtue of being mentally bounded by contrasting mental color qualities. So the sense impression of a red triangle also exhibits a mental quality of shape with a particular position in the quality space of mental shape qualities. The mental shape of the sense impression resembles and

<sup>46</sup> Conscious sensations of blue and green differ in respect of the blue and green qualitative character, but have in common the property of being conscious. Cf. Moore (1922: 20, 25). Moore was talking there about properties of sensations and not simply visible colors; see Moore (1942: 655–8), where he clearly distinguishes the two.

differs from other visual sense impressions in ways that are isomorphic to the ways visible triangular expanses of perceptible physical color resemble and differ from visible color expanses that have other shapes.

So a sense impression of a red triangle exhibits both a mental quality of red and a mental quality of a particular triangular shape. Consider then any arbitrary mental part of that mental triangular expanse. Perhaps the mental color quality within the mental triangular expanse varies, so that the mental part will itself be a mental expanse with mental boundaries of contrasting mental colors. But perhaps the mental color quality within the mental triangular expanse is uniform; in that case what demarcates the part are imaginary mental borders of some contrasting color.

In either case, the mental area that constitutes that arbitrary part will itself have to exhibit some mental color quality; otherwise there would simply be no way to fix the mental boundaries of the mental part. The same will hold in turn for any smaller mental part of the initial mental part. Every mental part of a mental quality of a red triangle will have to exhibit a mental color quality.

Ultimate homogeneity occurs if every proper part of a mental expanse of a mental color quality itself exhibits some mental color quality. QST gives us an account of just what it is for a mental color quality to have parts at all, and it is unlikely that any other theory will do so. And QST by itself implies ultimate homogeneity of mental quality qualities.

This conforms to what introspective awareness tells us, but is independent of those or any other subjective impressions, since QST concerns mental qualities as they are independent of being conscious. Every proper mental part of a mental expanse of color must exhibit some mental color, because that proper part is fixed by a mental shape quality and the mental boundaries of each mental shape quality reflects contrasting mental color qualities on both sides of each mental boundary. Indeed, the aspect of QST that delivers this result is, as noted in section 1, one that Sellars himself stresses; we visually access spatial boundaries only by seeing boundaries between colors (SR11 V ¶54; PHM ¶36, SPR 75, n.).

Though this result is independent of the introspective appearances, it explains why mental color qualities do appear introspectively to be ultimately homogeneous. Introspective appearances reflect how we are subjectively aware of our mental states. Since QST tells us what the mental qualities are of sense impressions of color, our awareness of those sense impressions will be as QST represents them; we are introspectively aware of mental color qualities in respect of the qualitative similarities and differences that constitute the relevant quality space. Introspection represents mental color qualities as ultimately homogeneous because QST does.

So mental qualities of color are ultimately homogeneous. But the ultimate homogeneity that QST delivers results in no difficulty for a scientific treatment of sense impressions, nor any difficulty for identifying those sense impressions with neural states whose properties exhibit no such ultimate homogeneity.

The difficulty Sellars saw arose only because of an added premise. Sellars held that the relative similarities and differences that determine location in a quality space fix

the types of mental quality not in a relative way, but in respect of the intrinsic nature of those mental qualities. With “sensations,” he urged, “the analogy concerns the quality itself,” that is, the “*intrinsic* character [of] sensations” (PSIM ¶99, SPR 35, ISR 403; cf. EPM §61 [3]). If being ultimately homogeneous is indeed an intrinsic property of each token mental color quality, it is unclear how to accommodate such mental qualities within the scientific image or to identify sense impressions of color with neural states.

Why does Sellars adopt this added assumption about intrinsic character? Sense impressions are manifest-image Jonesean posits, and their nature is fixed by the analogy that figures in Jones’s folk theorizing and the commentary that qualifies the analogy. The analogy as cashed out by QST does result in mental color qualities’ being ultimately homogeneous. But we need some additional reason to hold that Jones’s theory or QST also fixes the “*intrinsic* character [of color] sensations,” or that the ultimate homogeneity that QST delivers is itself an intrinsic aspect of such sensations.

Again, introspective and subjective appearances can’t help with this. Though it may seem subjectively that the way we are aware of our sense impressions in a first-person way determines their intrinsic nature, we have seen that subjective appearances aren’t even always accurate, much less indicative of some intrinsic character. And in any case, subjective awareness simply reflects what QST tells us about the nature of mental qualities.

Sellars sees Jones’s theory of sense impressions as fixing their intrinsic character, but denies that his theory of intentional states fixes theirs. So it is useful to compare the two cases. Jones posits intentional states by analogy with meaningful, nonparroting speech acts, extrapolating the content of intentional states by analogy with the roles those speech acts play in the behavioral economy of speakers.

As Sellars notes, such roles are a relational matter, determined by the linguistic moves we make with speech acts and hence the relations speech acts bear to perceptual inputs, to nonverbal behavior, and to one another (SRLG, LTC, MFC). So, as he stresses, the analogy that allows Jones to posit intentional states “leaves open the possibility that thoughts are radically different *in their intrinsic character* from the verbal behaviour by analogy with which they are conceived.” The analogy simply leaves open what that intrinsic character is (PSIM ¶99, SPR 35, ISR 403).

By contrast, he insists that in the case of sensations the analogy does fix their intrinsic character, because there “the analogy concerns the quality itself” (PSIM ¶99, SPR 35, ISR 403; cf. EPM §61 [2]). But nothing in the way QST spells out the analogy underwrites this conclusion. On QST, ultimate homogeneity is due not to the intrinsic character of mental color qualities, but due rather to what it is for something to be a mental part of a mental expanse of mental color. It’s because the mental boundaries that determine such mental parts are a matter of real or imagined contrasts of mental colors that all mental parts exhibit some mental color. QST sees mental color qualities as ultimately homogeneous not because of anything intrinsic to mental color qualities, but because of the interaction of mental color qualities with mental qualities of size and shape.

Sellars sometimes writes as though Jones's theory by itself determines the intrinsic nature of sense impressions (EPM §61 [2]). But that cannot be. Jones's theory of intentional states also fixes their nature, but not their intrinsic nature. Sellars's insistence that the theory fixes the intrinsic nature of the mental qualities of sensations must be due to something he holds specifically about qualitative character, not simply that qualitative character is fixed by Jones's theory.

Jones's theory models sense impressions on perceptible properties. But it won't help here to appeal to the intrinsic nature of visible colors. Our subjective sense of the ultimate homogeneity of perceptible colors when we consciously see them may pertain just to the conscious appearances of those physical colors, and not to their intrinsic nature. And we can extrapolate from those conscious appearances only if we have the relocation story to rely on.

Nor do the quality-space considerations that show mental color qualities to be ultimately homogeneous apply to perceptible physical colors. As with mental color qualities, the visible boundaries of proper parts of colored expanses are determined by contrasts in perceptible colors; so any visible part of such an expanse will itself be colored. But this applies only to proper parts that are visible, and visible expanses of perceptible color always have proper parts too tiny to be visible. Visible color expanses consciously appear to be ultimately homogeneous, but in reality they are not.

The only consideration that can explain Sellars's conviction that Jones's theory determines the intrinsic nature of sense impressions is his assumption that such states always occur consciously. Restricting attention to conscious vision takes out of play the proper parts of visible expanses of physical color that are themselves not visible.

And if being conscious were intrinsic to sense impressions, the properties in respect of which sense impressions are conscious would also have to be intrinsic to them. Being conscious could be an intrinsic property of sense impressions without thereby being accurate about the other properties of those states. But their being conscious goes hand in hand with the mental qualities in respect of which those states are conscious. So if being conscious is intrinsic to sense impressions, then so it is to whatever mental qualities sense impressions do actually have.

Jones's theory, together with the assumption that being conscious is intrinsic to sense impressions, would imply that their qualitative character is intrinsic to them. Their qualitative character would be an intrinsic aspect of sense impressions. And Jones's appeal to similarities and differences, as made precise by QST, implies that mental color qualities are indeed ultimately homogeneous. So if being conscious were an intrinsic property of sense impressions, their ultimate homogeneity would be as well.

But in subliminal perception sense impressions and their mental qualities occur without being conscious. The assumption of intrinsic consciousness is simply a result of adopting the relocation story; it is no part of Jones's theory of sense impressions, and can readily be detached from it.

Jones's theory of intentional states characterizes their mental properties relationally, relying on a relational characterization of the roles speech acts play, which are the

analogical basis for Jones's positing of intentional states. Once we reject the relocation story, things are similar for sense impressions. The physical colors that provide the analogical basis for positing mental color qualities are taxonomized relationally, by appeal to their relative discriminability and their resulting relative location in the quality space of perceptible colors. The ultimate homogeneity of mental color qualities is not something intrinsic to those qualities, but results from the way the mental boundaries that determine mental size and shape qualities depend on contrasts of mental color qualities.

Jones's theory conceives of and taxonomizes intentional states by analogy with the roles played by speech acts, and hence in relational terms. Similarly, his theory of sense impressions conceives of and taxonomizes sense impressions by appeal to perceptible similarities and differences, by appeal to relative location in the relevant quality space. Both characterizations are relational, and both equally leave open the intrinsic character of the states and properties thus determined. Ultimate homogeneity is not an intrinsic aspect of sense impressions.

So there is a tension in Sellars's thinking about sense impressions. His adoption of the relocation story, perhaps together with the influence of traditional views, leads him to see sense impressions as intrinsically conscious and to conclude that the way mental qualities consciously appear is intrinsic to their nature. But the similarities and differences that underwrite Jones's analogical positing, and which QST spells out independently of intrinsic consciousness, determine the types of mental quality relationally, not as intrinsic properties of the various sense impressions. It is of the nature of sense impressions that each exhibits some mental quality or other, but it is not intrinsic to any particular sense impression what type of mental quality it exhibits.

This tension between a quality-space taxonomy of mental qualities and seeing sense impressions as invariably conscious affects more than simply whether the qualitative character of a sense impression is an aspect of its intrinsic nature. If sense impressions cannot occur without being conscious, the way we are subjectively aware of them will trump any other knowledge we might come to have about them. And that will threaten the intersubjective characterization of sense impressions in respect of qualitative character that Sellars rightly insists on and takes Jones's theory to deliver.

And things are arguably worse. If the way we are subjectively aware of qualitative states trumps any other knowledge we could have about them, the way QST taxonomizes mental qualities would be mistaken whenever it departed from the deliverances of subjective awareness. And we cannot count on subjective awareness itself if, as argued earlier, such awareness can misrepresent what mental state one is in.

The relational taxonomy of QST doesn't fit with a taxonomy of mental qualities that relies exclusively on subjective awareness in yet another way. Relying solely on subjective awareness means ignoring the role mental qualities play in perceiving, and it is perceptual role that taxonomizes each mental quality in respect of its relations to others one can discriminate from it. So relying solely on subjective awareness encourages an atomistic taxonomy of qualitative states, on which the qualitative character of each

state is intrinsic to it, and does not depend, as on QST, on relations among mental qualities, in particular, on the ability to discriminate one perceptible property from another. Similarly, if one started by thinking that mental qualities are intrinsic to qualitative states, and so not relational properties, then one would have no way to access or taxonomize qualitative states except by appeal to subjective awareness. Atomism about mental qualities, that is, the view that they are intrinsic to qualitative states, goes hand in hand with the exclusive reliance on subjective awareness for the nature and occurrence of qualitative states.

But subjective awareness does represent mental qualities comparatively, as being closer to some than to others that one is sometimes aware of. Indeed, as noted above, subjective awareness represents mental qualities in far finer grain when they co-occur with others in their area of the quality space. Subjective awareness represents mental qualities in the way QST does.

One cannot combine a quality-space approach to the nature of mental qualities with the view that qualitative states are intrinsically conscious and hence have their mental qualities intrinsically, and not due to their relative location in a quality space.<sup>47</sup> The tension that results from Sellars's characterizing sense impressions in terms of similarities and differences and also seeing them as intrinsically conscious remains unresolved throughout his successive efforts to deal with their qualitative nature.

Jones's theory characterizes intentional states relationally, leaving their intrinsic nature open. But some, such as John Searle, have maintained that content is intrinsic to intentional states, and that no relational account can do justice to the intrinsic character of such content.<sup>48</sup>

It is notable that those who join Searle in this insistence also maintain that intentional states cannot occur without being conscious.<sup>49</sup> Seeing intentionality and qualitative character as intrinsic properties of the relevant states rests in both cases on seeing those states as intrinsically conscious. If being conscious were intrinsic to intentional states, then how we're subjectively aware of them would be the first and last word on their mental properties, and the mental properties we are subjectively aware of them as having would arguably be intrinsic to them.<sup>50</sup> One will hold that the mental

<sup>47</sup> In "How to Think about Mental Qualities" (Rosenthal 2010) I argue that QST is incompatible with holding, as many now do, that we know about mental qualities primarily by first-person, subjective access. The argument here is stronger; issues about access aside, QST is also incompatible simply with seeing mental qualities as intrinsically conscious.

<sup>48</sup> e.g., Searle (1983), chapter 1. Chisholm takes that position as well in arguing against Sellars's EPM in the published "Chisholm-Sellars Correspondence on Intentionality" (ITM).

<sup>49</sup> Searle himself in his (1990). Searle's official position is that intentional states are all potentially conscious. But his discussion makes clear that he is not claiming for each intentional state the potential to become conscious, but rather that states that aren't conscious but nonetheless invite being described in intentional terms are not genuinely intentional, though they have the potential to cause conscious states that are genuinely intentional. Note the parallel view about speech acts in Searle (1983), chapter 1, in which Searle takes speech acts not to exhibit genuine intentionality, but merely to seem to do so because they result from conscious states that are genuinely intentional.

<sup>50</sup> Rosenthal (2005), chapter 3, especially §§4 and 7.

properties of mental states of whatever sort are intrinsic to those states only if one sees the states as intrinsically conscious.

In the tension between a relational QST based on Sellars's appeal to similarities and differences and a view on which our subjective awareness of sensations fixes their intrinsic qualitative character, QST must win. Like intentional states, sensations do occur without being conscious, and we taxonomize sensations that aren't conscious in respect of the very same mental qualities that characterize conscious sensations. So consciousness cannot be intrinsic to sensations. This conclusion preserves the most central and distinctive aspect of Sellars's thinking about sense impressions, the taxonomy in respect of qualitative similarities and differences. And it allows us to explain not only why mental color qualities are ultimately homogeneous, but also why that poses no problem for a scientific treatment of sense impressions.<sup>51</sup>

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My last conversation with Sellars was about these issues. This paper is a much delayed effort to follow up on that conversation.

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## A Note on Citations

There is a standard method of abbreviated citation to Sellars's works, in large part thanks to the ongoing work over several decades of Jeffrey Sicha at Ridgeview Publishing Company, in his continuing efforts to keep Sellars's writings in print (<<http://www.ridgeviewpublishing.com>>). Also important to note in this regard are the bibliographical, archival, and other contributions from Andrew Chrucky available at his Sellars website, 'Problems from Wilfrid Sellars' (<<http://www.ditext.com/sellars/>>). The Sellars Archive held in the Archives of Scientific Philosophy of the University of Pittsburgh is also an outstanding resource for obtaining both the published and unpublished work of Sellars, much of which is also available online: <<http://www.library.pitt.edu/wilfrid-s-sellars-papers>>. It has been the vitally important funding by Robert Brandom and John McDowell via their successive Andrew Mellon Foundation Distinguished Achievement Awards that has made possible the processing and digitizing of the materials in the Sellars Archive, in addition to making possible the *Sellars Centenary Conference* at University College Dublin in 2012 that led to this volume.

The standard abbreviations of Sellars's works that follow have been used throughout this volume. Given the many different collections of Sellars's writings that are now and soon to be available—including digital and online versions with new numbering introduced for every paragraph (identified in this volume by '¶')—references to parts (e.g., 'VI') or short sections ('§') and paragraph numbers ('¶') of books and articles have frequently been substituted for or added to page number citations, to facilitate location across present and future editions. In some cases I have also followed the citation methods of particular contributors in various respects when these were usefully detailed in various ways.

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