

Homogeneous Pink

82. To put it bluntly, the fruits of painstaking theory construction in the psychology and neurophysiology of sense perception cannot be anticipated by screwing up one's mental eye (the eye of the child within us) and 'seeing' the very manner-of-sensing-ness of a volume of red. (Wilfrid Sellars *The Carus Lectures*, I)

In *Philosophy and the Scientific Image of Man*, Sellars introduces what is often called 'the grain argument'. There Sellars denies that perceptual states, such as seeing a homogenous pink ice cube, can be identified with neurophysiological states — at least not without the addition of new theoretical entities to neurophysiology (hence *The Scientific Image*), something on the order of 'sense fields'. Interpreters of Sellars have found these passages and their re-formulation in the *Carus Lectures* very difficult to reconcile with whichever Sellars they know and love. E.g. Why would Sellars — the sophisticated and considered Scientific Realist, foe of the Given — hold an anti-reductionist view of perceptual states?

This short paper on 'homogeneous pink' is part of a larger project on Sellars' theory of colour perception. As readers of Sellars know, colour perception in particular was a central example for Sellars, woven throughout his work and used for a variety of important philosophical ends. On our reading of his work, much of his explanation of colour perception — nay, most of it — was prescient: With the resources of current neuroscience at his (1960s) finger tips, Sellars could have rendered his abstract account of colour perception in a manner more accessible/digestible for readers. Here we present a brief synopsis of our interpretation of Sellars on colour perception (which we think interweaves with contemporary neuroscience), with the focus on Sellars' reticence about intertheoretic reduction for perceptions of 'homogeneous pink'.

To date, there have been four¹ central interpretations of 'the grain argument':

1. The Ineffability Reading (Thomas Metzinger)
2. The Analog/Digital Reading (DeVries, Coates)
3. The 'Colour as Simple Logical Quality' View (McDowell)
4. Intensive versus Extensive Magnitudes: Kant's Measurement Problem (Rosenberg, Watkins)

Our interpretation is superficially in line with McDowell's but at bottom significantly different. Our view starts with Sellars' insights that colour perception is conceptual or intentional 'all the way down': While a perception of a pink ice cube differs from 'merely' thinking about such a object, nonetheless colour perception does not involve 'non-conceptual content', either an epistemic or causal given. The adult concept of colour *is* the concept of a physical property. This fact is crucial to the explanation of

¹ Austen Clark offers a very interesting 'interpretation' in terms of the concept of density but Clark is clear that Sellars could not have held this view given his other philosophical commitments.

several aspects of colour perception writ large. These include the adult experience of colour, the genealogy of the adult colour concepts from ur-concepts of childhood, and the centrality of colour to our predication of properties to physical objects, as well as to the conceptual structure of the Manifest Image more generally.

In more Sellarsian terms, the main points are as follows.

1. The phrase “homogenous pink” cannot refer to an intrinsic, purely qualitative aspect of phenomenal consciousness (in the narrow sense) *pace* Metzinger.
 - a. Sensa, as Sellars conceived of them, are *posited* entities that explain how we come to perceive properties of the external world, in this case of seeing the colours.
 - b. We do not gain access to sensa by means of a process of phenomenological bracketing; such bracketing merely causes us *to think of* sensa as particulars of some type of other.
 - c. The perception of an ice cube *as* homogeneously pink is not a perception in which we are presented with a homogeneously pink ‘phenomenal field’. On the contrary, no natural image that we would judge to be an image *of* a homogenous pink ice cube contains a homogenous expanse of pinkness. Hence, ‘bracketing’ could not serve to isolate any mental particulars of the ‘homogenous pink’ variety.
2. Instead, homogeneity and colour are both *concepts* that apply to the physical world.
 - a. ‘Homogeneity’ refers to the *role* of colour within the Manifest Image. Any model or image of the world contains ultimate constituents of some kind or other, basic entities that are ‘simples’ *within* that particular image. Coloured ‘stuff’ plays this role in the Manifest Image. Our intuitive sense that all physical objects and media are coloured ‘all the way down’ reflects the central conceptual/causal role that colour plays in delineating — categorizing — the physical.
 - b. In adult perception, colours are (primarily) physical properties of objects; likewise, the primary use of colour terms is to refer to the colours predicated of physical objects.
 - c. This adult conception of colour did not arise, however, all in one piece: there is a ‘bootstrapping’ developmental story of how the adult concept of colour emerges out of a series of ur-concepts in the infant/child. The ur-concept progresses from the ability to distinguish volumes in the world via their chromatic features, to the attachment of causal properties to these colour-defined volumes and the categorization of those colour-delineated volumes via their causal properties, to seeing that volumes (individuated by colour) *as having* colours, to a concept of a physical object which has the property, colour, and finally to the self-reflective knowledge that we see the colour of objects as separate properties of the object.
 - d. Given this bootstrapping account of colour perception, it follows that the adult concept of colour requires significant experience in the manipulation and viewing of coloured objects/media. But it also requires interpersonal training and feedback to establish the correct use of colour

terms according to the conventions of the colour term usage — e.g. in the application of colour terms to translucent objects, in the presence of inter-reflection of colour from nearby objects, or coloured ambient light. More correctly, social interaction/convention AND visual experience are essential to an adult understanding colour *qua* physical property.

3. Given the complexity of the acquisition of colour concepts — the 'know how' of visual experience, the serial refinement of the categories of 'substance' and 'property' by means of chromatic information, and the role of social interaction in the correct use of colour terms, there is no simple identification of, say, a perception of a pink ice cube with, for example, a firing pattern of a neuron. Even if, contrary to the recent findings of visual neurophysiology, neuroscientists were to discover 'the' neural space of colour in the visual cortex in which each neuron occupied a location in the three dimensional colour space, the firing of the relevantly 'pink' neuron would not explain *how we see physical objects as having colours*. For Sellars, the mere correlation of such an event with the occurrence of a perception of an embodied pinkness would not explain why the ice cube was seen *as* homogenous pink, for this is a question of how complex concepts could be instantiated in the brain.

(Note that the presentation will merely indicate where in the neurophysiological and developmental literature evidence for these claims can be found.)