

# Kinds of ‘thing’ that are named by colour names

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There are many different kinds of ‘thing’ that are named by colour names. In this paper I will allow myself considerable latitude in what should count as a ‘colour name’ for the purposes of identifying an individual colour, and I will suggest that the means used to establish the identity of a colour determines what kind of thing it is that is being named. Recognition of the different kinds of thing that are named by colour names can help overcome confusions and misunderstandings.

There are alternative names for each of the 3,744 colours in the new *Dulux Colour Specifier* range of house paints (Dulux 2000). A selection from this range is available as individual colour chips. The word ‘Cuddlepot’ is printed on colour chip 207 and also under the colour sample on page 9, in column F and row 5 of the colour atlas. ‘P09F5’, ‘207’, and ‘Cuddlepot’ can each be recognized as a colour name that is used, according to circumstances, to identify what is supposedly the same thing, but exactly what it is that is being named turns out to be somewhat problematical.

The difficulty of determining what it is that is being named by a colour name can be illustrated very simply if you have two of the colour chips with the number 207 and place them separately on backgrounds of strongly contrasting colours. The well known phenomenon of simultaneous contrast will come into play so that the colour chips which have the same name, and so are assumed to be the ‘same colour’, no longer look the same. We could say that this is due to an illusion, but we could also say that we are dealing with two different kinds of thing.

A ‘thing’, in English, can be an entity, an action, an idea, an event, a quality, a circumstance, an object, even a person (Thompson 1995). It is an imprecise but versatile word. The physical properties of the two colour chips are essentially the same. If physical properties are the kind of thing we are dealing with then the colours are also the same. However, when we look at the colour chips against their different backgrounds, the visual experiences that we have are different. If visual experience is the kind of thing we are dealing with then the colours are different.

Philosophers cannot agree about the nature of colour. The various positions in the debate are described by Alex Byrne and David Hilbert (1997). Rather than argue in favour of one position or another it is more useful to accept Barry Maund’s idea of a pluralist framework for colour (Maund 2001). A pluralist framework can accommodate the many different kinds of thing that are recognized as colours and here I propose that a given surface can be understood to have seven different ‘kinds of colour’ which are related to the means used to establish the colour’s name.

The commonly held concept of colour conflates the physical with the visual. I am calling this *conventional colour*. Cuddlepot is used as the name for the paint as a physical substance as well as being the name for the appearance of the paint. The identity of some thing as a *conventional colour* is established when someone uses a name like Cuddlepot to mean a physical property which can be recognized by looking at it.

A physical substance is not the same kind of thing as its appearance. Peter McGinley (2001) has described the process of research and development which led to the establishment of the *Dulux Colour Specifier*. In response to my question about what it is that a name like Cuddlepot names, McGinley’s first response (2001, pers. comm.) was that it is a name for the paint formula – a

particular combination of base and tinters. It is the name for the paint as a physical substance. I am calling this *formula colour*. When people describe colours on the computer screen in terms of RGB values, or colours on the printed page in terms of CMYK values, they are also referring to *formula colours*. In a later conversation (2003, pers. comm.) McGinley told me that definitive samples of the new colours, including Cuddlepote, are kept in storage and could be matched with a new formula if desired. The relative amounts of light absorbed and reflected by a painted surface at each wavelength can be measured and represented in a graph. Such a graph can be recognized as a 'colour name' for what I am calling *spectral profile colour*. Colorimetry can establish the position of a colour on the chromaticity diagram as an indication of how an observer would match a given colour sample. A set of chromaticity coordinates is another form of colour name; it establishes the identity of a *psychophysical colour*.

If colours are understood to be visual experiences rather than physical properties, their identification must depend on the people who have the experiences. Faced with the fact that surfaces painted with the same paint can appear different in different circumstances, Karin Fridell Anter (2000) makes the distinction between what she calls *inherent colour* and *perceived colour*. The wall of a house that has been painted with Cuddlepote, when seen from across the road, may not appear the same as a Cuddlepote paint sample held in the hand. Nevertheless the *inherent colour* of the wall is still Cuddlepote and this can be established by placing the Cuddlepote sample on the surface of the wall for direct visual comparison. In the case of Fridell Anter's *perceived colour*, Monica Billger (1999) makes a further distinction between the overall colour impression and local variations. Billger calls the overall colour impression the *identity colour*. The local variations I have chosen to call, simply, *visual colours*. So, from a given viewpoint, a cube that is perceived to have been painted with the same paint all over would have one *identity colour* and three *visual colours* as the play of light makes each visible plane appear different.

In the built environment, as in the natural world, we derive information from colours. Our interpretation begins with the visual experiences, and the exact experiences we have depends variously on the work of artists, designers, scientists and technologists. As colour problems are tackled, by people working alone or in collaboration, it is helpful to recognize that colour is not one single kind of thing. The different kinds of thing, that concern different kinds of people, and which are identified by colour names, may be closely related but they are, nevertheless, distinct.

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