

052: Colour

“Sydney has a lot of blonde sandstone which reflects the light, so you see all these bright, light colours. Melbourne has a lot more blue granite and you can see it in the colour palettes of artists that come from the different cities.”
Phil George.

chronicles the exotic history of colours and our attempts to capture and recreate them at will. It is easy to forget the bloodstained history of colour in our digital world of RGB, CMYK and hexadecimal values. Battles were fought over certain colour pigments (not to mention the coloured flags that represented the various nations in these battles). Many people died through their love of colour. Though not strictly a colour, white pigment used to be made from lead, leading to horrible, drawn-out deaths, often of ladies who used it as make-up.

→ Remarkably, many methods of colour production have remained the same for centuries (you can still buy lead-based white paint for heritage buildings). Consider the carmine red in many lipsticks, also known as the red food additive cochineal (E120 or CMYK [0, 200, 160, 34] for you designers) that is found in many drinks. Cochineal is made from the blood of the female cochineal insect from South America. 70,000 dried and crushed little bodies make up just 450 grams of cochineal. Tasty.

→ Those blue jeans you are wearing are dyed with synthetic Indigo these days, but organic indigo is one of the oldest dyes known, dating back at least 5000 years. Even just 200 years ago your jeans would have been soaked in stale urine because indigo does not dissolve directly in water without some kind of chemical change.

→ Indigo has also been the source of much violence. Vicious trade disputes and oppressive trading laws between vying empires caused many an international

Painting by numbers

Has colour lost its soul?

Text <Andy Polaine>

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Colours are strange, amorphous beasts. Rather like our emotions, we experience them every day, yet they are virtually impossible to define objectively. Perhaps this difficulty arises from a scientific obsession with categorising a world that is inherently messy and chaotic. Naming colours is really a case of choosing arbitrary points on a continuous spectrum, but the quest to tie them down is steeped in drama.

→ Colour is laden with cultural meaning, or perhaps it is the other way around, cultural meaning is laden with colour. Every country chooses its flags based on ancient ideals and symbolism. Sporting teams, clans and tribes all represent themselves with colours that, in turn, represent their cultural myths. Mystics, artists, designers, colourmen, dyers and scientists have tried to capture colour for

centuries, but it remains as fleeting as the light from which it originates.

→ One problem is that our perception of these colours shifts and so does the technology used to display them (from the printed page that you are reading to the screen that I am viewing to write this). We see colour thanks to the light receiving cone cells in our eyes that come in three flavours, each of which picks up either red, green or blue. Our brains have a method for ensuring colour constancy, so a strawberry will always look red to us whether we look at it in the cold morning sunlight or the warm evening sunset.

→ Colour constancy is rather useful because it prevents us from eating all sorts of poisonous foods by mistake in the dim light of the campfire and has probably contributed to our continued existence on the planet. So, it is only an accident of evolution that we see the colours in the

visible light spectrum at all. Some other animals can see ultraviolet and infrared light. Imagine if we could see x-rays instead, we would be wonderful surgeons, but terrible at playing pool.

→ The problem for accurately matching colour is that we do not really know the algorithm by which the brain manages colour constancy. Ultimately, even the CIE XYZ colour space range (that fin-shaped colour map that you see when you venture into the calibration settings of your monitor) defined by the grandly named International Commission on Illumination ends up fairly subjective, because at some point you have to ask a test subject which colour is brighter, even if those colours are from completely different colour spaces. Colour's subjective nature has been the source of a rich history.

→ In her wonderful book, *Colour: Travels Through the Paintbox*, Victoria Finlay

scrap, not dissimilar to the current trade 'agreements' Australia is making with the US. The ancient Britons used to paint themselves with woad, a similar dye, before going into battle. Despite the Europeans' penchant for 'having a blue', for Hindus blue is a sacred and often lucky colour, because it is the colour of the god Krishna. The sixth Chakra – the third eye of intuition – is represented by the colour indigo. Strange that the colour of intuition should so often be used as a corporate colour and the ugly default PowerPoint slide style.

→ In Australia, ochre has long held a sacred significance as both the colour of the land and a sacred colour in Aboriginal culture and paintings. The boundaries between representation and subject dissolve – ochre is the earth and many of the secret stories revolve around the journeys undertaken to search for the

perfect sacred ochre. Ochre and charcoal are also the oldest colours in the history of art; the exquisite cave paintings in Europe may date back to around 36,000 years ago. It seems fitting that earth and ash, which represents the cycle of life and death, should also be the record of our existence on the planet.

→ Photographer and artist Phil George has been documenting the deserts of Australia and the Middle East as part of his doctoral research. The landscape images look like giant natural palettes, some of which George deliberately skews, as in *The Affliction of the Protestant*, a startling image of an enormous mosque built in the middle of the desert in Abu Dhabi. The photograph is adjusted to a deep green hue because George wanted to play on the blurry CNN portrayal of the Middle East, which is often represented by the green night vision of the military and its "fictional pseudo narrative of events".

→ "In contrast, my photographs have incredibly high detail. When I show it in the west, the audiences see the 400-foot towers as reminiscent of missile silos and it plays into that culture of fear that is represented by the US-led media," says George. "Interestingly, in the Middle East, it is perceived completely differently. Green is a homage to the prophet Mohammed and you will often see mosques lit with green floodlights, as well as most of the countries having green in their flags."

→ Designers and artists are often influenced in their use of colour by their environments, their natural palette just like their ancient ancestors. "Sydney has a lot



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of blonde sandstone which reflects the light, so you see all these bright, light colours," observes George. "Melbourne has a lot more blue granite and you can see it in the colour palettes of artists that come from the different cities. Sometimes people accuse me of using Photoshop on the Western Desert skies; they are simply not used to seeing such clear air and bright light."

→ They say that wines are best drunk in the region that they have been grown because there is a resonance between the taste and the environment. The same is true of colours. It is hard to imagine the bright pinks of Miami working in Melbourne, or the drab greys and browns of London suiting the brilliant white islands of Greece. Colour has as much a tone of voice as words or typefaces. Paint manufacturers try in vain to conjure up emotional associations. Names like 'Red

Sand', 'Peacock Blue' or 'Waiting Room Green' all evoke images designed to try and fix not only a colour, but also the feeling of that colour. My favourite is 'Dead Salmon'.

→ In the last issue of *Desktop*, Tomato's John Warwicker bemoaned the lack of colour used by contemporary designers, attributing this dearth to the computer. But humans are able to discern around 10 million colours and the average monitor can display at least 16 million. Perhaps it is not the lack of available colours that is the problem, but the environmental palette and nature of the screen. On the computer, icons, labels, highlights all tend to be bright hues thanks to the legacy of 16 or 256 colour monitors and the correspondingly dismal 'web safe' palette. Colours in the real world are not simply flat blocks, but complex combinations of textures and hues. Painters have the luxury

of using pigments in their paintings, often made from the elements of nature, some with tiny crystalline structures that shimmer in the light.

→ Colours are intimately woven into our cultures and emotions. It is often our job as designers to try and translate emotions into colour. According to George, "We want it kind of zappy and youth, but not too edgy, we need to reference our heritage" is a not uncommon client brief. If we restrict ourselves to the few colour swatches we just happen to have open in *Illustrator*, we lose the opportunity of an emotional connection, colour loses its soul and we are simply painting by numbers. ●