My conversion to blue occurred in May 2005, in the attic of a stone terraced house in the Crookes area of Sheffield. My sister and I had an appointment there with a Colour Me Beautiful consultant, who worked from her home. The stairs up to the top floor opened directly into a large open room, full of bales of material, swatches of samples, and bottles and pots of cosmetics. CMB promises a personal transformation. On its current website, it proclaims that ‘wearing colours that complement your colouring can make you look healthier, more vibrant and younger’. The consultant establishes what your dominant colouring is, and how this determines what clothes and make-up you should wear. I was identified as a ‘cool winter’ person; the little folder of twenty-nine swatches of material I came away with is dominated by teal, periwinkle, aqua, and royal, medium and Chinese blues, together with reds and greens with blue tints, and the instruction to go for an ‘overall look’ of blues (with eye pencils in ‘marine’). On the few occasions in the past I had deviated from black and other neutral colours in my clothing choice, I had never even considered blue. It turned out to be excellent advice. And outside the world of fashion, I already knew quite a bit about the history of the colour in Western art.

Cennino Cennini, early fifteenth century: ‘Ultra marine blue is a colour illustrious, beautiful, and most perfect, beyond all other colours; one could not say anything about it, or do anything with it, that its quality would not still surpass.’

Goethe, 1810: ‘As the upper sky and distant mountains appear blue, so a blue surface seems to retire from us. But as we readily follow an agreeable object that flies from us, so we love to contemplate blue, not because it advances to us, but because it draws us after it.’

Kandinsky, 1911: ‘Blue is the typical heavenly colour. The ultimate feeling it creates is one of rest. When it sinks almost to black, it echoes a grief that is hardly human.’

Yves Klein, 1957: ‘What is blue? Blue is the invisible becoming visible ... Blue has no dimensions. It “is” beyond the dimensions of which other colors partake.’
William Gass, 1976: ‘Praise is due blue, the preference of the bee.’

Julia Kristeva, 1977: ‘Thus all colors, but blue in particular, would have a noncentered or decentering effect, lessening both object identification and phenomenal fixation. They thereby return the subject to the archaic moment of its dialectic, that is, before the fixed, specular “I”.

Derek Jarman, 1993: ‘Blue transcends the solemn geography of human limits.’

Press release, 10 December 2007: ‘Pantone, Inc., the global authority on color and provider of professional color standards for the design industries, selected PANTONE 18–3943 Blue Iris, a beautifully balanced blue-purple, as the color of the year for 2008. Combining the stable and calming aspects of blue with the mystical and spiritual qualities of purple, Blue Iris satisfies the need for reassurance in a complex world, while adding a hint of mystery and excitement.’

And, for good measure (and perhaps rather surprisingly), Michel Pastoureau, 2000:

‘All of the studies focusing on the “favorite color” question conducted since World War I show, with striking regularity, that more than half the people polled in Western Europe and the United States indicate that blue is their favorite color.’

Ideas about the effects of a certain colour, its associations and symbolism, are far from uniform cross-culturally. In addition, the naming of colours is almost impossible to clarify for earlier periods and for other cultures. It is not simply a problem of translation from another language, as Michel Pastoureau has explained:

It is difficult to determine which Greek or Latin words designate blue because both languages lack basic, recurring terms for it, whereas white, red, and black are clearly named. In Greek, whose color lexicon did not stabilize for many centuries, the words most commonly used for blue are glaukos and kyaneos ... During the classical era, kyaneos meant a dark color: deep blue, violet, brown, and black. In fact, it evokes more the ‘feeling’ of the color than its actual hue. The term glaukos, which existed in the Archaic period and was much used by Homer, can refer to gray, blue, and sometimes even yellow or brown.

Philip Ball tells us that blue and yellow are categorised together in some Slavic languages as well as in other languages in northern Japan, East Nigeria and among some northern Californian Native Americans.

Austerity baby
And in Western Europe since the medieval period there are plenty of examples of shifting meanings of colour terms. According to John Gage, the medieval colour terms bloi and caeruleus could each refer to blue or yellow, perhaps because of the technologies that produced them, in which mid-stage colours are transformed into others. All these authors are careful to warn us that unnamed colours are not necessarily unseen; or, rather, that the distinctions our language makes may be just as visible to those whose words do not identify and differentiate in the same way. Linguistic difference does, though, have implications for the use and status of particular colours in that culture. And it does remind us that our own categorisations and hierarchies (primary, secondary, complementary) are in an important sense arbitrary. Wittgenstein said as much in 1950, when he insisted that identification of colour is always a language-game.

If the identification and recognition of colour cannot be assumed across place and time, then neither can any intrinsic meaning or symbolism of a colour. Blue, says Pastoureau, was considered a warm colour in medieval and Renaissance Europe, and only began to be seen as cool in the seventeenth century. Kandinsky, mapping out his theories of the spiritual qualities of colour and colours, believed that blue was associated with the circle (red with the square, yellow with the triangle); his contemporary Adolph Hoelzel, on the other hand, had thought red circular, blue rectangular, as did the artist Oskar Schlemmer. William Gass (On Being Blue) and Alexander Theroux (The Primary Colors) each free-associate for pages on the meanings and associations of the colour. The radically diverse associations of colours with shapes and meanings lead John Gage to conclude that ‘colour symbolism has always remained inescapably local and contextual’.

And yet it is possible that there are pre-social factors in play. Colour itself is the effect of the electromagnetic field of light on the eye, where different sets of retinal photoreceptors are receptive to different wave lengths. Blue, with a wave length of 420 nanometers, has a higher frequency than green, red and yellow. Julia Kristeva suggests that this quality of blue produces a special reception, which she explores in relation to frescos by Giotto in Padua:

Blue is the first color to strike the visitor as he enters into the semidarkness of the Arena Chapel ... The delicate, chromatic nuances of the Padua frescoes barely stand out against this luminous blue. One’s first impression of Giotto’s painting is of a colored substance, rather than form or architecture; one is struck by the light that is generated, catching the eye because of the color blue. Such a blue takes hold of the viewer at the extreme limit of visual perception.
In this way, blue has a particular ‘decentring effect’, engaging with the viewer at some pre-linguistic, pre-conscious level. I don’t know how to assess this kind of claim against the overwhelming historical evidence of cultural relativism in colour perception (that, combined with my own prejudice in favour of sociological accounts). But in a 2011 BBC programme, Horizon, on the theme of colour (and entitled ‘Do you see what I see?’) proposed very specific qualities of blue – presumably intrinsic rather than culturally specific – in which, interestingly, blue is perceived once again as a ‘warm’ colour. Experiments with restaurant décor found that diners perked up in the late evening in blue rooms. Scientists on the programme explained that we have photosensitive cells which are receptive only to blue, and which send the body a signal to wake up. Further, they argued that the colour blue digs into our earliest evolutionary consciousness, since primitive one-cell organisms can detect only blue and yellow; red and green reception came later, as new receptors developed in the eye.

This business of meaning and symbolism turns out to be rather tricky, though I am inclined to default to my rather automatic resistance to such universal, socio-biological claims – at least until persuaded otherwise. We are on safer ground, though, in looking at the clear evidence for the changing importance of blue throughout the history of Western culture. This history is nicely summarised by Colm Tóibín, in a 2004 catalogue essay for a Dublin exhibition called ‘Blue’: ‘Blue was the banished orphan who lived to take the throne’. He bases this on his reading of Gage, Pastoureau and others who have recorded the fortunes of blue, in art and in textile dyeing, over two millennia. It is primarily a history of the availability, and therefore cost, of materials. It is a history of plants – woad and indigo – and minerals – lapis lazuli, azurite, cobalt – and, later of the invention of synthetic blues. It is also very much a social history, linked not just to the discovery and extraction of colours but to navigation and trade routes, relations between nations and, especially in the case of indigo, the patterns of colonial power. For example, Philip Ball points out that the highly valued blue, lapis lazuli (also known as ultramarine, because it came from ‘beyond the sea’), was more common in Italy than in northern Europe during the Renaissance, because it arrived from Afghanistan and elsewhere through Italian ports.

Michael Baxandall’s classic social history of Italian painting gives a marvellous insight into how the value and price of the precious mineral played out in the fifteenth century, in the detail of a 1485 contract for Domenico Ghirlandaio’s Adoration of the Magi (in the Spedale degli
Innocenti in Florence). The Prior of the Spedale specifies clearly that the artist ‘must colour the panel at his own expense with good colours and with powdered gold on such ornaments as demand it, with any other expense incurred on the same panel, and the blue must be ultramarine of the value about four florins the ounce’. Baxandall explains:

After gold and silver, ultramarine was the most expensive and difficult colour the painter used. There were cheap and dear grades and there were even cheaper substitutes, generally referred to as German blue. (Ultramarine was made from powdered lapis lazuli expensively imported from the Levant; the powder was soaked several times to draw off the colour and the first yield – a rich violet blue – was the best and most expensive. German blue was just carbonate of copper; it was less splendid in its colour and, much more seriously, unstable in use, particularly in fresco.) To avoid being let down about blues, clients specified ultramarine; more prudent clients stipulated a particular grade – ultramarine at one or two or four florins an ounce.

The fortunes of lapis lazuli in the history of art are entirely to do with its cost of extraction and transport, and its rarity, just as the fortunes of indigo in the history of textile dyeing are inextricably linked to Europe’s role in India and, later, America and the West Indies. In the West, although there were alternatives to lapis lazuli for artists, in particular the cheaper mineral azurite, it was ultramarine that was the most prized blue. The colour blue itself, rather insignificant in earlier periods, emerged in the twelfth century as a highly fashionable and desirable colour, manifested most clearly in the new practice of rendering the robes of the Virgin in ultramarine. Blue became a royal and noble colour, in painting and in heraldry. By the seventeenth century blue had taken its place as a primary colour, displacing the white-red-black triad which, according to Pastoureau, ‘had been the focal point of Western color systems since antiquity (if not before’.

Orange: blue’s complementary colour, and absolutely banned by my CMB adviser in Sheffield. Nevertheless, it inserts itself here as something to be confronted, representing a memory as uncongenial to me as the colour itself. Early 1979 – I’m not sure of the exact date. By then, there were only three of us still living in a collective house in Leeds, after a falling-out the previous autumn, during my three-month absence in the United States. Complicated personal relations, sexual politics and other problems I was kept informed about – I assume it must have been by letter, since there was no email then and I don’t recall many phone calls. It was a large, four-storey terraced house, five minutes
from the university where three of us worked, and still ‘inner city’

enough to have been very affordable (£10,000, as I recall) in 1975. Most

recently it had been used as a children’s home, and perhaps because

of that there were bathrooms on three of its four floors. The lower

ground floor comprised a living room and a large kitchen/dining room,

with a door out to the small garden at the back. We spent most of our

time, together with many visiting friends, round the table in that room.

But now the house would soon be sold and we would each be living

somewhere else. Before that, though, was orange – in the form of a line

of washing hanging one morning in the basement kitchen/dining room,

announcing our housemate’s expected decision that she had joined

the Bhagwan. A shared domestic life – five adults and two children –

begun four years earlier, tailed off rather pathetically at that point. As

for the colour – the new sannyasin, who left for India soon after the

washing episode, wrote in her 2007 memoir:

Someone once asked Bhagwan why we had to wear orange. He
explained it was the traditional colour for sannyas, the colour of
sunrise signalling the dawning of a new age. But I think it was to
mark us out, to force us into each other’s arms, as who else would
willingly walk down the street next to someone swathed in such a
deadly colour.

All this is now more than thirty years ago, and no doubt none of us
remembers the details. Still, coming across a memory which bears little
relation to my own has something of a shock effect. In the same book,
she writes about the time, a couple of years earlier, when she had
come to live in our house:

I applied to join a neo-Marxist socialist-feminist commune. After

an interview where I wore my badges of revolutionary slogans,
dropped in the names of my most right-on mates, mentioned the
conferences I’d attended, the barricades I’d fought at, I was in.

Applied? Interview? Political requirements? And four people (one had
recently left) as a ‘neo-Marxist socialist-feminist commune’? We were
really just a group of friends, with no particular shared political activities
– two men, two women, some of us colleagues, two with kids who
lived half the week with us and half with their fathers, nearby. The
account has no connection at all with my memory of our household.

And I also try to square my memory of the orange-dyeing moment with
that of her son, then aged three, who lived with us part of each week.
His name was Tim Guest (Timmy in those days), and many years later
he wrote a wonderful and moving book, My Life in Orange, about his
early years in the Bhagwan’s communes in India, England and the
United States.
St. John’s Terrace, Leeds, 1975

Cover of Tim Guest’s *My Life in Orange*

Tim Guest as a young child, with his mother, Leeds, c. 1977

*Colour (mainly blue)*
Three weeks after hearing his voice on tape, my mother posted her letter to Bhagwan. That afternoon, upstairs playing with my Lego, I heard a loud splash. I went down to investigate. My mother was in our bathroom, her arms stained orange up to the elbows, sloshing all her clothes around in the bath, which was filled to the brim with warm water and orange dye. Later that evening she wrung her clothes out and hung them by the fire – to my delight, they left permanent orange stains on the fireguards – and from then on, she wore only orange.

An old friend from the Leeds days got in touch in 2004, to tell me that ‘Timmy’ had written a book which was getting a lot of publicity. That is how I found out that he had become a journalist and writer. Although I lived with him and his mother only for a couple of years, and haven’t seen either of them since 1980, I read the book with great interest and have reread it several times since. It is a beautiful, generous, heart-breaking story, an account of the disasters of communal life based on a strange (and later discredited) spiritualism, sexual freedom and chaotic disorder for the children involved. John Lahr, the New Yorker critic, called it one of the best autobiographies of the decade. Elaine Showalter, reviewing the book in The Guardian, says that this ‘calm, meditative, and even lyrical memoir is a testament to his recovery’. Certainly he became a very successful writer. The particular memory doesn’t fit though. For one thing, he and his mother had a bedroom each and a bathroom they shared all on one floor, so he wouldn’t have gone down to investigate. Also, we didn’t have open fires anywhere in the house, so I can’t see how there could have been fireguards. Of course it doesn’t matter. But I hoped to get in touch one day, and compare memories. This didn’t ever happen.

Tim Guest’s second book, Second Lives, was published in 2007. It is an ethnographic study (if this isn’t a contradiction) of virtual communities and of the entrepreneurs who created those worlds, and it too was very well received by critics and readers. Later, some noticed the continuities between the two books, the recurring damage, perhaps the impossibility of full recovery. Guest himself (it seems a little strange not to call him Tim) hints at it, without making this a big deal in the book – indeed, only on page 246, though he alludes to the connection briefly throughout:

When I was four, my mother and I moved into the communes of her guru – a bearded man-god who promised ecstasy and delivered mainly absence. I was supposed to be the child of the commune, not of my mother ... In the communes that bore Bhagwan’s name, she and her friends danced, rolled their heads, swayed their arms, beat cushions, broke down their social conditioning and set themselves
free. Meanwhile, we children filled our lives as best we could with the things we found around us.

I filled the space with my imagination ... By chance, I had uncovered the purpose of the imagination: to conquer absence. Our dreams give us a lens through which to examine what we lack – just as virtual worlds do.

In 2004, he wrote a short personal essay for the *New York Times* magazine about his fear of commitment, his desire to marry and his deep resistance to taking this step and particularly to having children. His girlfriend of five years is keen for them to buy a house, and she wants to start a family. He knows that his resistance has everything to do with his own suffering as a child of the Bhagwan’s communes, and some sort of fear that his own children might suffer. He ends on a tentatively optimistic note, deciding to go ahead with the house and to try to leave his childhood behind: ‘Maybe it’s time to let go of my grievances, to grow up, to give some new little person a chance to be young.’ In fact he got married in October 2008, to a woman he met at the Notting Hill carnival in 2006. Ten months after the wedding, his new wife found him dead in bed, at the age of thirty-four. The first obituaries reported an unexplained death, with suggestions that the cause was a heart attack or a stroke. In an essay in the *Observer* in March the following year, Elizabeth Day tells the full story – of his early life, his recovery through writing, his periods of drink and drug-taking, and his eventual marriage. He died of an overdose of morphine. Day speaks to his family and friends and his wife Jo, and concludes that although this was almost certainly not a suicide ‘it seemed none the less as if his commune experience had cast a long shadow and he was never entirely sure whether to embrace its legacy or try to escape it’.

I am touched by the fact that this lovely writer (and, by all accounts, lovely person) has a connection, before his troubles really began, with a moment in my own life. The moment before orange.

What is a complementary colour? The combination of the two other primaries (so here, red plus yellow as complementary to blue). Or (the Newtonian version), the colour which, combined with its primary, makes white in coloured light, grey in coloured paint. Or, on the colour circle we have employed since the seventeenth century, the colour directly opposite its primary. Or, the colour of the after-image through closed eyes after staring at its primary. One might think that a primary and its complementary constitute a colour clash to be avoided. But many artists have realised that they may enhance one another when
placed together – Delacroix, the Impressionists, van Gogh. According to John Gage, ‘throughout the nineteenth century complementary contrast was widely regarded as the most harmonious because it constituted a union of all three primary colours’. I suppose what goes for fashion advice simply doesn’t apply in the same way in aesthetic, and technical, decisions about painting. But my prejudice against orange, from my blue vantage point, apparently needs a bit more thought. A quick internet search turns up a range of companies, mostly in the design and technology industries, which capitalise on the combination of opposites: Blue Orange software consulting, Blue Orange Signs, Blueorange web technologies, Blueorange IT, Blue Orange Marketing, as well as a Blue Orange theatre (and a play, by Joe Penhall, called Blue/Orange, about race and mental illness, in which a patient maintains that oranges are blue). It seems that the clash is seen as productive and dynamic, just as the juxtaposition may be striking and beautiful in a work of art.

It may, on the other hand, turn into the grey that is the unavoidable blur when juxtaposition becomes total merger. As David Bomford and Ashok Roy record, Michel-Eugène Chevreul, director of dyeing at the Gobelins tapestry workshop in the mid-nineteenth century, promoted the use of complementary colours, but ‘warned that colours that mutually enhance each other can also cancel each other out if too intimately mixed: as an example, he wrote of threads in a tapestry that would appear merely grey if adjacent complementaries were too closely woven’. This became a problem in Seurat’s pointillist technique, where ‘uncalculated greyness’ surrounded the points of colour in some paintings. But here I want to put in a word for greyness, calculated or otherwise. In the field of art, the case is made by Gerhard Richter:

[Grey] makes no statement whatever … it evokes neither feelings nor associations; it is really neither visible nor invisible. Its inconspicuousness gives it the capacity to mediate, to make visible in a positively illusionistic way, like a photograph. To me, grey is the welcome and only possible equivalent for indifference, non-commitment, absence of opinion, absence of shape.

In his grisaille paintings, often blurry as well as monochrome, this ‘absence of opinion’ compels our own reflections, whether they are the series of works about the Baader-Meinhof group or the painting based on a photograph of an aunt of his, a schizophrenic killed in a euthanasia camp by the Nazis. There is a certain moral imperative in the way in which refusal of colour presents us with the image. The ‘indifference’ of the image evokes quite the opposite, I think, in the viewer, namely the insistence that we think for ourselves.
Gerhard Richter,
_Tante Marianne_, 1965

Gerhard Richter, _Abstract Painting (Grey)_ , 2002

Colour (mainly blue)
Now that I have navigated the threat of orange by merging it with blue, the grey I am left with is a colour with which I have a great affinity. (As it happens, though this is incidental, there are also three shades of grey in my CMB personal colour guide.) That ‘capacity to mediate’ which Richter alludes to is very compelling, and if we substitute ‘uncertainty’ for ‘indifference’ then I feel sure this describes an important lifelong value of mine, though one I have only recently come to recognise, articulate and defend. My last book was called *The Aesthetics of Uncertainty*, and its project was to refuse certainties – especially uncritical, unconsidered certainties – in favour of an aesthetics (and an ethics) willing to start from a position of not-knowing. The open-minded negotiation of meaning and of value, in dialogue with others and with other points-of-view, is for me a particularly attractive feature of some contemporary political and theoretical trends. So if grey stands for that – one could say the avoidance of colour, the mediation of black and white keeping things fluid and not quite certain – it is an appropriate metaphor. But this is not about avoiding responsibility, nor is it a kind of postmodern relativism. Rather (to stay with the colour model) the image, confronting us in grey and perhaps also blurred, makes us think differently about its moral and political content, as well as its nature as painting and representation – a familiar avant-garde strategy. When I think about it, too, my academic life over more than thirty-five years was always somewhere between disciplines – sociology, cultural studies, art history, aesthetics – and institutionally nearly always in an interdisciplinary unit or project. A scholarly dilettantism (shared with many colleagues and friends over the years – that has been the trend in our corner of the humanities and the social sciences) which is another crucial kind of uncertainty. Grey Studies, maybe.

Primo Levi’s concept of the ‘grey zone’ of moral behaviour is not unrelated to this project of principled negotiation, though his subjects are acting out of what Lawrence Langer has called ‘choiceless choices’. These are the Kapos and Sonderkommandos of the Nazi concentration camps, many of them Jews and all of them prisoners, who operated as functionaries and thus, in a sense, as collaborators, helping to run the camps. He writes at length too about Chaim Rumkowski, elder of the ghetto of Lodz, who mediated between the Gestapo and the inhabitants of the ghetto. Levi identifies a hierarchy of collaboration, from ‘those whose concurrence in the guilt was minimal and for whom coercion was of the highest degree’ to those who took more powerful roles and, at the extreme, those who performed them willingly and with cruelty. But he refuses to condemn any of them. ‘How would each of us behave if driven by necessity
and at the same time lured by seduction?’ he asks. This impossible situation constitutes the grey zone:

The harsher the oppression, the more widespread among the oppressed is the willingness, with all its infinite nuances and motivations, to collaborate: terror, ideological seduction, servile imitation of the victor, myopic desire for any power whatsoever, even though ridiculously circumscribed in space and time, cowardice, and, finally, lucid calculation aimed at eluding the imposed orders and order. All these motives, singly or combined, have come into play in the creation of this gray zone, whose components are bonded together by the wish to preserve and consolidate established privilege vis-à-vis those without privilege.

Levi included himself among those in the grey zone, exploring his residual feelings of guilt in an essay on shame. Still, he is less concerned to identify and judge levels of collaboration than to insist on the recognition of circumstances of confusion and ambiguity. Scholars of the Holocaust have since shown how many ‘grey zone’ areas there were outside the camp and the ghetto – in industry, in the church, in the French detention centres, even in the area of postwar Holocaust restitution. The Holocaust is always the extreme case taken in discussions of ethics and morality, not always usefully if it is intended as a generic example. But I do think that the concept of the grey zone, somewhat downgraded from its stark and terrifying existence in Primo Levi’s experience, memory and testimony, is one we should retain, as an injunction against simplistic and unconsidered judgement.

I don’t think any of this is disloyal to blue. After all, as Philip Ball tells us, in Classical literature the distinction between grey and blue was not at all clear. Blue was not then recognised as a colour in its own right, and was considered a colour related to black – ‘a kind of grey’.

When I was thirteen, my life changed from black and white to technicolour. This, though obviously metaphorical, at some level feels literally true. We moved house that year (1956), from a semi-detached house in north Manchester to a larger, detached house in south Manchester, and my memories of the earlier period seem to have no colour in them at all. Certainly the house was darker and gloomier. The new house had bigger rooms, more windows and a larger garden, and it was in an area with many more trees. I had also recently moved from an inner-city lower-middle-class/working-class primary school to a solidly middle-class direct-grant girls’ high school, which in retrospect also somehow feels like a lightening, and a coming-into-colour.
Austerity baby

Class photograph, Temple primary school, Cheetham Hill, Manchester, c. 1951

Class photograph, Manchester High School for Girls, 1955.
There is of course one obvious explanation for this chromaticising of my memory. Colour photography was newly available at this time. When I look through our old family photo albums, everything is black and white – in fact right through into the early 1960s. And then, around 1956, the occasional colour photo turns up. Here is one of my sisters and me, inexplicably inserted among pages of black-and-white photos, dated 1956 on the back.

The effect is something like the 1998 film *Pleasantville*, in which a teenage brother and sister are transported through their television set into the black-and-white world of a 1950s sitcom, a world which gradually takes on touches of colour as its inhabitants discover emotions, freedom from rigid social conventions, and sexual liberation. I mean the surprising – and at first – fleeting appearance of colour in my black-and-white world. And as with the movie, I suppose I am talking about a kind of liberation, which colour seems to connote.

At the cinema too we were now seeing more films in colour. Although Technicolor itself dates from the 1920s and 1930s, and home movies had used colour film for a while, it was only in the 1950s that colour film became widespread, after a successful 1950 anti-trust case against Technicolor and the simultaneous development of lower-cost colour film. Eastman Color was crucial here, and so twenty years after his death, and still forty years before I came to his city, where I lived for ten years, George Eastman of Rochester, New York, already figured in my life. Steve Neale has traced the history of Technicolor:

> In fact, the value of colour to the film industry fluctuated during the 1950s and 1960s as the relationship of the industry to television, and as the importance of colour within television, themselves shifted and changed. The use of colour in film production increased steadily from 1935 to 1955, accelerating in particular during the early 1950s until colour films comprised some 50 per cent of total US output ... It was only during the mid-1960s, when television had converted to colour, that the use of colour in the cinema became virtually universal.

We know very well that a switch to colour within a film (*The Wizard of Oz* is the obvious example) can signify transition into a fantasy world, or at least a different world. In Wim Wenders’s *Wings of Desire* the coming-into-colour signifies the angels’ full immersion in the ‘real’ world of everyday life. So the effect of adjusting from black-and-white films to the new colour cinema must have been something similar. In a context in which reality has been conventionally represented in black and white, the introduction of colour was bound to register a kind of exotic shift. The history of colour cinema and its technologies is a fairly new, and fast expanding, field in film studies, but I haven’t...
found anything yet that discusses the particular effects on audiences of that moment of relearning how ‘the real’ may be represented. (These days we tend to consider black-and-white footage, whether documentary or fictional, as ‘authentic’ in a certain way.) Of course what I am really interested in here is the reverse effect: the possibility that the immersion in cinematic colour has transformational power in our everyday lives and, more particularly, our memories. My strong suspicion is that my idea that the world became colourful in 1956 was mediated by a visual imagination radically reorganised by photographs and the movies. The introduction of colour television in Britain in 1967 no doubt reinforced the effect.

I think there is another, more personal, factor in my emergence into Technicolor. Just before we moved house in 1956, my grandmother, my father’s mother, had moved into a retirement home. She had lived with my parents since their marriage, and therefore with me for my whole life. Widowed within six months of her arrival as a refugee from Germany in 1939, far from any members of her family apart from her son, she did not have many options. In our very discreet and calm household – no fights or arguments, no strong emotions, certainly no mention of unpleasant things – this all seemed like a ‘normal’ arrangement. I didn’t even consider, until much later, that this may have been a rather ghastly situation for both my mother and my grandmother. I also had absolutely no knowledge then of the probable cause of my grandmother’s sadness – the loss of many family members, including her sister Leonie, in the Holocaust. Now I am absolutely sure that the new ‘lightness’ (colour) after the move was very much to do with a general sense of release – not just the absence of my grandmother (who was, it is true, a rather dark and brooding presence, and always dressed in dark colours) but more particularly the lifting of my mother’s depression. After sixteen years of marriage, she was living with just her husband and daughters – including a new baby girl, born in November 1954. I think I am right that from the age of thirteen I was no longer living in black and white.

The Oranienburg company outside Berlin, where my father worked before emigration, was the twentieth-century descendant of one started by the chemist Friedlieb Ferdinand Runge, mentioned briefly in my father’s short memoir:

A famous German chemist called Runge worked here on the same premises where later a chemical works was built. He was a distinguished scientist of the early 19th century, who discovered a
large number of basic chemicals, among them phenol, aniline and atropin. He also discovered caffeine from a box of coffee beans which Goethe gave him as a curiosity. In 1832 he started a chemical company producing the first candles from stearin. This firm, after a number of name changes, became the Oranienburger Chemische Fabrik, ORACEFA or OCF for short, the company for which I worked. The house in which Runge had lived and worked was a well-preserved museum piece on the premises of the company, which was always very proud of its historical background.

As I have discovered more recently, in connection with my developing interest in Manchester’s history in textile production, Runge was the first to produce synthetic blue, the product of his researches on coal tar in 1833. He named it ‘cyanol’, blue oil. Its other name, given by a researcher in 1841 who had produced the same substance by treating indigo with caustic potash, was aniline. This was the beginning of the aniline dye industry, so crucial in textile production through the nineteenth century. The person generally credited with the discovery of aniline dyes is William Perkin, who in 1856, at the age of eighteen, produced, in the course of his experiments with coal-tar aniline, the first usable synthetic colour – mauve. After this, the possibilities of synthetic colour expanded, and the new colours multiplied. They were enthusiastically taken up by the thriving textile industry. Perkin went on to discover and market other dyes, and received many honours, including a knighthood. He retired a very wealthy man. But Runge, with one or two other earlier researchers, is there in the background, as Simon Garfield relates:

By the time Perkin found mauve, aniline had been linked with colorants and colour-producing reactions for thirty years. The liquid had first been discovered by the Prussian chemist Otto Unverdorben in 1826, one of several products isolated from the distillation of natural vegetable indigo. Some years later the chemist Friedlieb Runge obtained it from the distillation of coal-tar, and found it gave a blue colour when combined with chloride of lime. But such colours were considered to have no practical use.

Colours, especially blues, had been synthesised artificially for many years – millennia, in fact. Egyptian blue was in use before 2000 BC; according to Philip Ball, this was a blend of calcium oxide, copper oxide and silica. In the early eighteenth century, a scientist called Johann Jacob Diesbach, trying to make red paint, accidentally produced a new blue. This mixture, iron ferrocyanide, was named Prussian blue. Over a hundred years later, Prussian blue was to prove of great importance in Japan, where it was known as berorin-ai. Hokusai’s iconic, and greatly influential, 1831 print The Great Wave
uses three shades of Prussian blue for the water and indigo blue for the outlines and the text.

But what was radically new was the growing understanding of the structure and composition of the materials – in other words, the rise of the chemical industry. Later, other dyes were added to aniline dyes – alizarin (a red from the madder plant) and azo dyes. And through those nineteenth-century decades the traffic between Germany and England was particularly fascinating (a subject, of course, of personal interest to me, given my father’s experiences a century later). The first great chemists were in Germany, and notably at Justus Liebig’s laboratory at the University of Giessen. Simon Garfield quotes Liebig’s own assessment of England’s deficiencies in the early part of the century, speaking at the British Association meeting in 1837: ‘England is not the land of science ... There is only widespread dilettantism, their chemists are ashamed to be known by that name because it has been assumed by the apothecaries, who are despised.’ The establishment of the Royal College of Chemistry in London in 1845 was inspired by Liebig’s lectures, whose fans included the prime minister, Robert Peel, ‘who expressed personal interest due to his family’s involvement in calico printing’. The first director of the College was August Wilhelm von Hofmann, who had studied in Giessen. By the 1860s German scientists were moving to England, and specifically to Manchester and its surrounds, employed by textile companies to develop their dyes. Hofmann predicted that England would become ‘at no distant date ... the greatest colour producing country in the world’. Hofmann continued: ‘nay, by the strangest of revolutions, she may, ere long, send her coal-derived blues to indigo-growing India, her tar-distilled crimson to cochineal-producing Mexico and her fossil substitutes for quercitron and safflower to China and Japan’. In fact this was already the case by the time he wrote this, in his report on the 1862 International Exhibition in London.

The story of blue ends, for now, in Manchester, which suits me very well. Some of the most important chemists lived and worked here in the mid- to late nineteenth century: Lyon Playfair, Frederick Crace-Calvert, Henry Edward Schunck, Heinrich Caro, Ivan Levinstein, Charles Dreyfus. Some started their employment in the textile industry, often brought over from the Continent by the calico printers or simply deciding to come because of the opportunities linked to the industry. Some started, or joined, laboratories in the new Owens College (later the University of Manchester). And some started their own chemical factories (Roberts, Dale and Co., Clayton Aniline, Levinstein & Sons). New colours were discovered and produced in Manchester,
Katsushika Hokusai, *Under the Wave off Kanagawa*, c. 1831

Colour (mainly blue)
Blue steps, Panarea, Aeolian Islands

Austerity baby
including Manchester Brown and Manchester Yellow in the 1860s. As R. Brightman put it in 1957, ‘Manchester can fairly claim to be the home of the first attempts to synthesise new dyestuffs to meet the growing demands of the expanding textile industry for fresh supplies of colour, and speedier and simpler methods of applying them’. There are also, in these developments, some blues in Manchester, for example Ivan Levinstein’s Blackley Blue of 1869–70. Robert Kargon records Crace-Calvert taking out patents in the 1860s for new colouring matters, including Azurine (blue) from aniline and its homologues.

In 1938, my father’s belated departure from Germany was possible because of a new chemical company, Lankro Chemicals, founded in Manchester by another German-Jewish refugee. Heinz Kroch had known my father at university in Freiburg and gave him the job which enabled him to emigrate. It was not a company involved in work for textile production, but its very existence was due, I think, to the history of the chemical industry in Manchester.

I like the sound of Friedlieb Ferdinand Runge, of whom my father seemed so proud. Esther Leslie devotes quite a few pages to him in her fascinating book on nature, art and chemistry, Synthetic Worlds. As well as the famous discovery of aniline dye (and a reminder of the story about Goethe and the coffee beans) we learn he was criticised by Hegel, in his doctoral viva, for not theorising properly ‘in a philosophical manner’ (though he did pass the exam); that as a populariser of science he wrote manuals for many different trade groups, as well as a series of letters for housewives; that an acquaintance visited him and found him ‘with hair in long curls hanging down to his shoulders ... with one hand he was filtering a precipitation, while the other was stirring a few potatoes, which were boiling over a chemical lamp’. He continued to do many experiments and make many discoveries in colour chemistry and he developed a notion that there is a ‘drive to formation’ (Bildungstrieb) – a sort of life-force – in chemicals, shown in the images which form when chemical solutions are dropped on to paper. These images he considered a ‘painterly art’, and he clearly took pleasure in their beauty at the same time as observing their structures and effects. The long-term effects of his 1833 discovery of cyanol were the guarantee of another kind of beauty – the deep blues of calico in Manchester, and of fabrics around the world.
Diary page, March 1943

Janet Ann. 25. 3. 43.

Arrived a few days after schedule at 6:10 am. Thursday. Very tiny, ugly & thin - folds of skin without any fat. Weighed 5 lbs, 4 oz. She improved rapidly however - or maybe I just got more used to her - but even so when we went home (5/4/43) she wasn't very beautiful.

She gained weight very quickly & was soon looking very sweet & lovely - not only my opinion. On the 25th April she gave her first real smile (not wind) & smiled quite frequently after that. But only when she felt like it, especially when she felt tired.

On the 25th May she was