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Perfume Advertising and the Senses

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The Colours of Smell: Perfume Advertising and the Senses

Brian Moeran

Abstract

This paper examines perfume advertising within the overall context of theoretical approaches to the study of smell. Pointing out that smell is marked by a paucity of language, it proceeds to examine how smell is represented in perfume advertisements. Based on an analysis of more than 250 ads worldwide, the paper asks if there are any consistent relations between language, colours and smell materials, as well as between models' poses, seasons, and classes of perfume (floral, oriental, woody, and so on). It proceeds to survey a number of writings linking colour with smell, and suggests that olfactory marketing should, perhaps, be more consistent in its linking of these two domains in advertising and packaging.

Keywords

Advertising, classification, colour, language, olfactory marketing, perfume, smell

Author

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The Colours of Smell: Perfume Advertising and the Senses

Brian Moeran

'We live in a world of smells, where only the absence of smell is remarkable.'
(Moncrieff 1970: 17)

Smell 'Myths'

This paper is about the language and representation of smell. With a particular focus on perfume advertisements, it describes, on the one hand, how smell is classified and talked about and, on the other, how colour has been used to represent smell. Its aim is to put forward a number of theoretical questions which, in the opinion of the author, need further research. As Danièle Dubois (2006: 90) notes, compared with that of colours, the scientific exploration of odours remains problematic.

The theoretical discourse devoted to smell 'reflects a maze of fascinating taboos and mysterious attractions' (Corbin 1994: 8). Almost everyone writing about smell makes use of a set of 'myths' – a particular 'mode of signification' or 'form' (Barthes 1957: 193) – in his or her presentation of olfactory facts. Such myths include health, morality, otherness, physiology, seduction, sexuality, social bonding, even the number of smells (Avery 2008: 1-5), among other themes, and cover a broad range of cultural, historical, linguistic, moral, (neuro-)physiological, racial, religious, sexual, social and symbolic olfactory phenomena.

Although this is not the place to enter into a detailed description of *all* aspects of this academic mode of signification, three of these myths are relevant to the following discussion and analysis of perfume advertising around the world. The first is the *myth of the undervalued sense*. Because 'the olfactory experience is difficult to define' (Rouby *et al.* 2002: 1), smell becomes the 'suppressed' or 'forgotten' sense (Wyatt 1993: 270; Watson 2000: 3), and so 'remains the great uncharted frontier of sensory science' (Gilbert 1995: vii; cf. Ellis 1928: 51-52). The evidence from perfume advertising supports this myth, in the sense that hardly any perfume advertisements refer to properties of *smell* as such when promoting particular products or brands. In all the 264 advertisements analysed, only one (for *Juicy Couture*) makes a direct reference

to the fact that a perfume is olfactory: with the headline 'Smell me!' Fewer than half a dozen others hint directly at their olfactory ingredients. Exceptions include 'an intense harmony of rare and precious woods' (Cacharel's *Noa Eau de Parfum*); 'provocatively spicy and 'le nouveau fleuri boisé' (Kenzo *Jungle Elephant* and *Tigre* respectively).

Second is the *myth of articulation*.¹ Smell is characterized by a 'baffling poverty' of nomenclature to describe it (Locke 1841: 65; Engen 1987; cf. Theophrastus 1926 [371-287 B.C.E.]: 327), other than in terms of its causes (the smell of roses, for example) or its effects (an enchanting smell) (Sperber 1975: 115-119). In a vast majority of languages, smell has no primary olfactory words (Williams 1976), no independent taxonomy, and does not lend itself to mental abstraction. This makes smell seem the 'least intellectual' of the senses (Gonzalez-Crussi 1989:65).² As we shall see, this myth explains the adoption of certain marketing practices, such as product naming and the choice of colours used in packaging.

Perfume advertisements resort to two immediate strategies to overcome the problem of olfactory perception. Either they make, albeit limited, use of *other* senses (such as 'It touches everything' [Calvin Klein *Beauty*] or Monsoon's 'see more, hear more, smell more, taste more, feel more'). Or they refer to the senses in general ('a fragrance to seduce the senses' [Donna Karen's *Cashmere Mist*]). At the same time, however, they frequently transform the senses into sensuality (witness 'sensuality to the extreme' [Yves Saint Laurent *Opium*] and 'unveil your sensuality' [Lancôme *Hypnôse Senses*]).

Third, there is the *myth of transformative ritual practices*. Incense has been used in Assyrian, Babylonian, Buddhist, Chinese, Egyptian, Greek, Hebrew, Hindu, Japanese, Maya, Minoan Cretan, Parthian, Phoenician, Roman, even – eventually – in Christian rites of worship. 'The spreading of the smoke and fragrance of incense and the visible movement of that smoke upwards towards the heavens has given it a symbolical relationship to prayer, making the offering synonymous with worship' (Groom 1981: 2).³ Not surprisingly, the word, *perfume* – it is frequently noted (e.g. Rimmel 1865: 4; Ackerman 1990: 56; Stoddart 1992: 168; Goody 1993: 33; Pybus and Sell 1999: 3; ; Classen *et al.* 1994: 16) – means 'through smoke' (from the Latin *per fumum*). Perfume thus 'included the notion of communicating, even conveying prayers, with the gods above' (Goody 1993: 3) as fragrant resins were burned to create a

¹ It has been claimed that the only inborn olfactory mechanisms is an aversion to putrefaction and dead bodies (Köster 2002: 32). This does not explain how new-born babies smell their way to their mothers' breasts.

² As a result, philosophers from Plato onwards have regarded smell as a 'primitive' or 'lower' sense (Aristotle 1936: 103-127; Le Guéner 2002: 4), inferior to the 'most intellectual' or 'higher' sense of sight (Ellis 1928: 82; McCartney 1968: 1; Corbin 1994: 6-7).

³ Is it any surprise, then, that the assembly of cardinals, gathered to elect a new Pope, should signal agreement on their choice by lighting a fire and sending out smoke through a chimney in the Vatican for all outside to see? The Pope, like the kings of ancient Assyria, is an intermediary between people and gods, separated from each by 'holy fire'.

physical pathway between heaven and earth (Classen *et al.* 1994: 42; Dove 2008: 21).

Incense has been, and still is, burned to 'ward off enemies of the dead' (Groom 1981: 3), as well as to commemorate the dead (cf. Rimmel 1865: 139-166). The Egyptians held that 'the gods exuded a sweet odour and that safe passage to an after-life could be assured if the cadaver was provided with sufficient fragrance' (Stoddart 1992: 169; Groom 1981: 3). They called incense the 'divine odour'; it was the very sweat of the gods that had fallen to earth (Stamelman 2006: 113). Similarly, the words of Buddha were said to be fragrant, while the smell of incense was thought to invoke the Buddha's presence (Morita 1992: 34).⁴

The transformatory nature of incense and perfume is clearly apparent in fragrance advertising: 'Just one moment can change everything' (Calvin Klein's *Eternity Moment*); '*Ce que vous êtes, ce que vous deviendrez*' (Natori); and '*Une femme ne porte pas mon parfum... Elle devient Chloé*' (Chloe). Moreover, a perfume can even mark a social transition: 'Born to reveal the woman you've become. Not just a perfume. A rite of passage' (Valentino) – thereby supporting anthropological literature which suggests that in almost all societies there is a connection between olfaction and transition (Gell 1977: 28), and that this connection can be explained at logical, psychological and sociological levels (Howes 1987). Olfaction is used on various ritual occasions to mark a category change (for example, from profane to sacred and *vice versa*, from life to death, and so on). Smells are therefore closely associated with liminal occasions (such as birth and death), because they are 'matter out of place' (Douglas 1975: 50) – formless, resisting all attempts at description and classification, and crossing boundaries, 'neither here nor there... betwixt and between' (Turner 1969: 81). Their very continuity enables us to link social categories to one another (Howes 1987: 408).

Smelling the Difference

This research began from a simple observation. It is known that different members of different peoples living in different parts of the world tend to exhibit smell preferences that are peculiar to them, even though there are no differences in *biological* makeup among such peoples. Such preferences may depend on age, gender (Moncrieff 1966), and social class (Classen 1992: 136-8), but are also often formed in particular social, cultural and physical environments. Cattle herding pastoralists in the Sudan and East Africa, for example, anoint or smear themselves with the body products – urine and dung, in the main – of their cows (Evans Pritchard 1940: 37), while their *ghee* is considered to be both an assurance of fertility and the 'perfume' of women

⁴ This 'odour of sanctity' (Ellis 1928: 55, 62) came in another form: if a sweet smell issued forth from a corpse when a tomb was opened, it was held to be proof of sainthood in the Middle Ages (Gonzalez-Crussi 1989: 74-76; Goody 1993: 182; Classen *et al.* 1994: 52-54; Corbin 1994: 244-245 [with quotes going back to 1901]).

(Almagor 1987: 109). The Papuans of Kaiser Wilhelm's Land used to rub fragrant plants into their bodies in order to induce love in their partners (Ellis 1928: 95). For the African Bushmen the loveliest smell is that of rain (Fox 199*: 31). Citronella scents in laundry products are better accepted in Europe, where citronella means 'old-fashioned cleanliness', than in the United States, where the most common use of citronella oil is in insect-repellent candles (Jellinek 1975: 199).

Often differences in smell preferences are connected with food (Moncrieff 1966: 209, Classen 1992: 135). The Dogon of Mali, for instance, like to rub fried onions all over their bodies, since the scent of onion is by far the most attractive fragrance a young man or woman can wear (Fox 199*: 30). The Japanese have customarily referred to Europeans and Americans as 'stinking of butter' (*batakusai*) (and have themselves been said to smell of soy sauce and pomade [Kirkup 1985]), and north Europeans have tended to regard those living in the Mediterranean region as 'reeking of garlic'. Although in southern Asia and many African countries, women have traditionally used vegetable oils in their hair to beautify themselves, the smell of rancid oils is rejected as reminiscent of spoiled food in countries where this cosmetic practice is not prevalent (Jellinek 1975: 198-9).

In spite of such obvious differences in cultural preferences and resulting 'smellscapes' (Porteous 1985), and in spite of the fact that a casual stroll along the main thoroughfares of any large city around the world quickly gives an impression of the kinds of perfume that the women living there like to wear, perfume advertisements suggest that there exists but a single set of smell preferences in the world today. Regardless of whether they appear on hoardings or in magazines published in Hong Kong or the USA, in France or Japan, in Russia, South Africa, or Brazil, advertisements for such brands as Chanel's *No 5*, Christian Dior's *Addict*, and Guerlain's *Mitsouko* all make use of the *same* visual images and the *same* headlines and copy to appeal to their *different* target audiences. In the world of perfume advertising, gender and age differences may be addressed – witness the general distinction between masculine and feminine perfumes, on the one hand, and the advertising of *Shalimar* to 'mature' women and Jennifer Lopez' *Still* to teenagers and women in their early 20s, on the other – but smell preferences are assumed to be universal, rather than culturally distinct.

Clearly, there is sound economic reasoning behind such an approach. Perfume manufacturers wish to sell a product that has global, rather than merely local, appeal. They are not prepared, therefore, to alter the formula used to make Lancôme's *Trésor* or Calvin Klein's *Eternity* merely to make each perfume more appealing to particular peoples living in particular parts of the world with their particular climates, local foods, environmental conditions, and smell preferences. It makes no business sense to manufacture and market *Obsession* scented with cow's urine in the Sudan, or *Midnight Poison* with Marmite in the UK.

All the same, the challenge for the perfume industry has been twofold: first, how best to overcome particular cultural olfactory preferences; and second, how best to represent smell in visual form. It could be argued that the industry's answer to the first part of this challenge has been simply to ignore the fact that different peoples in different parts of the world tend to exhibit different olfactory preferences. In a way, this is exactly what it *has* done. But such apparent olfactory imperialism is rooted in the major communicative problem mentioned above: our sense of smell cannot adequately be described in words and so transformed into a readily recognizable form of linguistic communication.

This cognitive failing makes the second part of the perfume industry's challenge even more urgent: how to establish a system of representation that will evoke a particular fragrance and ensure that each perfume somehow overcomes gender, age and cultural preferences so that it is accepted – admittedly to a greater or lesser degree, but accepted all the same – by consumers all over in the world. This is the rationale underlying the introduction of *families* (fresh, floral, woody and oriental) by which perfumes are currently classified – something to which I will return later on in this essay.

Perfume Advertising

Although academic analyses of advertisements can be criticised for revealing more about analyst's preoccupations than about advertisers' intentions, it is clear that advertising professionals *do* understand and make use of signifiers, signifieds, and signs in the construction of advertising campaigns. In other words, they do try to transfer more or less structured characteristics and values prevalent in the socio-cultural domain to products, services and brands (Williamson 1978: 43). The issue is not *if* they do it, but *why, how, and for whom* they do so (Moeran 1996).

The manufacture of perfumes and fragrances is an essential component of the fashion industry. It is the point of entry for women wishing to buy fashion clothing.⁵ Perfume advertising, like fashion and many other 'experience' products, appeals to images and emotions, rather than to informational elements. In other words, it does not describe a perfume's scent

⁵ There is a sense in which perfume echoes fashion, of which it is an intricate part. Just as fashion 'rests on a violent sensation of time', destroying that which it has just been admiring and is about to destroy (Barthes 2006: 106), so is perfume subject to its ephemeral character. Heart notes take over from top notes, and base notes from heart, as each set of olfactory molecules evaporates in the air. The sensation of time in perfume is not violent, but it is inexorable in its presence, waning away and loss. Is there, though, a *style* (a sense of *chic*) in perfumes, as Barthes argues for Chanel. Do perfumes such as *Mitsouko*, *Jikky*, *Miss Dior* and *Chanel No 5* constitute a *style* of continuity that is set against the come-and-go *fashion* perfumes of *Champagne*, *Champs Elysées* and celebrity names? How many perfumes are 're-launched' in an effort to achieve fashionable success that lasts little longer than a single fashion season of spring/summer or autumn/winter?

and only rarely hints at the materials that go into its making (Goldman 1992: 23). A perfume ad does not focus on product attributes (in the way that an ad for a laundry soap powder might do), but accentuates user image. It sells a mood or fantasy rather than a fragrance *per se* (Goldman 1992: 26). By inviting a woman to look sexy or fresh, to feel intoxicated or natural, perfume advertising in general ends up accentuating a look or feeling, rather than smell (the undervalued sense, once more). Odours used in perfumes do not in themselves *denote* anything in the publicity material advertising them. Rather, they are used metaphorically as symbols that *connote* a woman's inner self, sensuality, beauty, desire, and, among other themes, the possibility of transformation. So 'smell is sundered from its natural context' (Goldman 1992: 27) as advertisers make use of semiotic (visual) and semantic (verbal) information 'to precipitate odour identification towards specific arbitrary meanings (mostly coinciding with the perfumer's ones) to prompt perfume purchases' (Velasco-Sacristán and Fuertes-Olivera 2006: 219).

Unable to describe or invoke the particular fragrance of its product, perfume ads almost invariably make use of both cause (a *floral* note, an *oriental* accord) and effect (an *exhilarating*, *magical* or *intoxicating* scent), which are then represented and reinforced by means of images, colours and language (such as a serpent wrapped around the neck of a naked woman with brightly painted red lips, emphasizing sin, desire, or other advertised olfactory effect).

The naming of smells ends up as the naming of the sources of smells (Sperber 1975: 115), so that in a perfume a number of different sources may be selected as representative of that fragrance. Thus does an 'oriental with a floral heart' perfume like *Dior Addict*, for example, advertise its top note as Sicilian mandarin, heart note as Queen of the Night (tuberose to you or me), and base note as vanilla. It is further advertised as having a 'fresh and fruity accent', as well as 'sweet and spicy accords'.⁶ The problem with this kind of olfactory categorization is that when odour components are successfully balanced, they tend to lose their perceptual individuality and fade away in the face of the fragrance as a whole. This is known as 'olfactory form,' which – like a Durkheimian collective or Gestalt theory – 'yields more than the sum of its components' (Holley 2002: 19). As a result, individual ingredients become meaningless, while the overall classification of *Dior Addict* as an 'oriental with a floral heart' merely tells potential purchasers that the perfume claims to have some heavy base note ingredients with one or more flowers as middle notes.

In addition, website publicity also points to a fragrance's symbolic effects. Here, image marketing is brought to bear to produce an 'olfactory aura' that gives perfumes a 'pseudo-magical force' (Classens, Howes and

⁶ A perfumer relies both on purely sensory expertise *and* semantic knowledge when composing a perfume. During this process s/he is able to create a mental image of a perfume and imagine the odours of which it is composed (Holley 2002: 24).

Synnott 1994: 188). This is borne out by phrases like 'timeless, magical and feminine' for Givenchy's *Organza*, which 'rouses the goddess hiding in every woman'; or an 'oriental harmony' described as 'very warm, sensual, almost bewitching'.⁷ When in full-flight, website publicity (like this particular brand) becomes addictive: *Dior Addict* is the 'soul of enchantment', an 'intensely seductive, serene, sensual scent' for the 'sophisticated, passionate, intuitive woman who ignores dictates and follows her own rules'. Although Jellinek (1990: 17) understandably argues that the perfume industry should change the way it communicates its products and 'describe perfumes in words and terms that the end consumer finds meaningful', it is hard to see how this might be successfully achieved. Because of the paucity of olfactory terms, smell more or less *has* to be represented as something else. Metaphors *have* to be used.

But *how*? Odours (sandalwood, bergamot, oakmoss) rarely indicate anything in themselves (lavender, lemon, mint, orange, and rose are among the exceptions). They have to be accompanied by visual and/or linguistic signs (romance, freshness) for them to 'make sense'. How do advertisers go about constructing such signs?

'The most meaningful signifiers of female fragrance advertising are ad heroine and colour scheme/background. Static or dynamic image, pose, smiling or serious expression, clothes, make-up; as well as dark or light, bright or neutral, and complicated or simple colour scheme, creates the emotional overtone and sense of the advertising. Product appearance and verbal text are secondary elements'

(Papanthymou 2003: 3)

The three most important elements in the composition of perfume ads, then, are visual images, colours, and language. It is on these that this research has focused as it sought to ascertain if perfume advertising constitutes a visual *system*. Some of the questions posed of the material have been:

1. Is there any consistent relation between the different visual elements of a perfume advertisement (headlines, model's dress and/or accessories, perfume bottle, and so on) in terms of matching of colours and/or overall tone and/or forms?
 - Answer: yes, fairly consistent matching of colour among visual elements in individual advertisements, and occasional matching of form (for example, between model's pose and bottle shape).
2. Is there any consistent relation between a model's appearance (hair colour, state of undress, and so on) and the language (keywords) used to represent a perfume?
 - Answer: no, except that there seems to be a tendency for the theme of sexuality and/or seduction to be accompanied visually by a state of undress or nudity.

⁷ <http://www.givenchy.com/givenchy/uk/organza.html>. Consulted 19 September, 2000.

3. Is there any consistent relation between the model's hair colour and the fragrance family of perfume advertised (floral, fresh, oriental and woody)?
 - Answer: some, to the extent that black haired models tend not to be used to advertise floral perfumes, while blondes are much more common in ads for fresh perfumes than they are for other fragrance families. (*See Table 1*)
4. Is there any consistent relation between a model's appearance and olfactory ingredients?
 - Answer: no.
5. Is there any consistent relation between the fragrance family of perfume advertised and the overall visual tone used in an advertisement? In other words, can we expect to find lighter tones used in ads for – say – fresh and floral, and darker in oriental, perfumes?
 - Answer: For the most part, no. But oriental perfume ads tend towards an overall (medium) dark tone, as do woody perfume ads to a lesser extent. Fresh and floral perfume ads do *not* exhibit a tendency towards lighter tones. (*See Table 2*)
6. Is there any consistent relation between the fragrance family of perfume advertised and the colours used in an advertisement? In other words, can we expect to find consistent use of green and brown with woody perfumes, for example, or white, red and yellow with floral perfumes?
 - Answer: generally speaking, no. But advertisements for floral perfumes use comparatively more pink and blue, as well as grey scale, than do those in other categories. Ads for oriental perfumes use comparatively more skin, black and purple, very little white, and no blue. Although the sample for this category is small, ads for fresh perfumes use no black or red, and comparatively more green and yellow. (*See Table 3*)
7. Is there any consistent relation between the use of language (keywords) and the use of colours, such that one might predict that the theme of nature, for example, will normally be represented by yellow and green, or romance by red or pink?
 - Answer: generally speaking, no. But skin advertisements (that is, those in which the predominant or only colour is the model's bare skin) predominate in the categories of beauty, fantasy, fresh ness, luxury, nature, sensuality, time, transformation and un/dress. There are also no grey-scale ads in the freshness category. (*See Table 4*)

8. Is there any consistent relation between the use of language (keywords) and fragrance families, such that one might predict, for example, that floral perfumes might be associated with femininity, and oriental with seduction?
 - Answer: for the most part no. When present, often marked by the absence of a particular linguistic category. Thus, ads for fresh perfumes do not make any use of keywords hinting at seduction, while ads for floral perfumes never make use of fantasy. On the positive side, floral perfumes are advertised by keywords symbolizing beauty, nature and luxury (none of which are found in advertisements for fresh, and hardly at all for oriental, perfumes). (*See Table 5*)
9. Is there any consistent relation between the use of language and olfactory ingredients, such that one might predict, for example, that the inclusion of (a synthetic) ambergris will normally be accompanied by keywords denoting sultriness, or of rose by keywords denoting romantic love?
 - Answer: not yet analysed. (*Table 6 to be created*)
10. Is there any consistent relation between olfactory ingredients and the use of colours, such that one might predict that the inclusion of jasmine, for example, will normally lead to the dominance of white (or yellow), and of orange to the colour of the same name?
 - Answer: no. (*See Tables 7a, 7b, and 7c*)
11. Is there any consistent relation between the use of overall colour tones and the season in which a perfume is advertised?
 - Answer: no, except that medium dark and dark were comparatively more frequent in ads appearing during the autumn and winter months of the year. (*See Table 8*)
12. Is there any consistent relation between the use of individual colours and the season in which a perfume is advertised?
 - Answer: no, except that white is used comparatively less in autumn and winter than in the other seasons of the year. (*See Table 9*)

These questions and answers were derived from about twenty years of sporadic gathering of perfume advertisements during the course of previous research on advertising, as well as on women's fashion magazines published in five different countries (France, Hong Kong, Japan, the UK, and USA) between 1985 and 2005 (Moeran 1996, 2005). These I then divided into feminine and masculine groups, and set aside the latter. Next, together with two research assistants,⁸ we entered those advertisements for feminine

⁸ I am very grateful to Frederik Larsen and Sarah Netter for their extended work on this project research.

perfumes featuring both a female model (sometimes accompanied by a male model) and some form of descriptive language (264 ads in all) into a database, where such features as keywords, overall tone, dominant colours, model's dress colour, perfume bottle colour, and other relevant visual and linguistic elements were highlighted. From these we tried to synthesize linguistic categories and colours. Each perfume entered in the database also carried information on its olfactory properties: namely, overall family in which it was classed (fresh, floral, woody and oriental); together with the main ingredients making up its top notes (e.g. bergamot and orange blossom), middle notes (e.g. rose and jasmine), and base notes (e.g. oakmoss and vanilla). Advertisements featuring only a bottle (with or without language), or a model but no language (other than 'The new fragrance from...' or 'The new feminine fragrance'), were put aside for future research.

The apparent simplicity of the questions posed above raised problems regarding both the methodology and analysis that followed. In the first place, we had to fix on one of several dozen methods used to distinguish and measure colours. Should we employ the Natural Color System used by Schifferstein and Tanudjaja (2004), for example? Or the Munsell Book of Color employed by Gilbert, Martin and Kemp (1996)? Or one of the many colour wheels available on the Internet? How were we to take into account the fact that different advertisements for the same perfume can differ in hue (so that, for example, yellow becomes more like gold, or vice versa), as a result of printing conditions?

In the end, we opted for a simple primary- and secondary-colour scheme of red, purple, blue, green, yellow, and orange, to which we added black, white and grey. We then conducted independent matching of up to three dominant colours found in individual ads. On the basis of this, we agreed to further add grey-scale, pink and gold because of their frequent usage and a possible assumed link between pink and love, on the one hand, and gold and luxury, on the other.

Secondly, how were we to deal with olfactory ingredients? Should we adopt one of the classical systems of olfactory classification: the Crocker-Henderson odour classification set, for example, with its four fundamental odour associations of *fragrant*, *acid*, *burnt* and *caprylic* (*goatiness*) and try to work out relative weights of each association in all named ingredients (Ross and Harriman 1949)? How were we to find out in the first place which ingredients featured most prominently in any single perfume? Might it not be better to distinguish individual odours: rose, for example, or vetiver, or ylang-ylang, as itemised by a particular perfume's manufacturer? But what should we make of the inclusion of such flowers as the poppy, tulip, peony, primrose, peony, or lotus blossom, all of which are fundamentally odourless – as are the imaginary 'coral flower' and 'flower of mother-of-pearl' found in Rochas's *Aqua woman* (Stamelman 2006: 35, 37)? Should we perhaps forget about individual ingredients entirely and opt for the fragrance 'families' promoted by the perfume industry itself? But which family classification in particular? Was *fruity* a family of its own, or an adjunct of *floral*? Should

woods, grasses and ferns be separated out, or lumped together as *green*? And what of *chypre*?

In the end, we decided to make use of Michael Edwards' *Perfumes of the World* (2007) which provided both primary ingredients – divided into top notes, middle notes, and base notes – and overall classification into one of four families, as well as subdivisions thereof. Whether we agreed with Edwards' classification or not, at least the material upon which we based our analysis was more consistent than a random sampling of Internet sites. In our database, we included up to four ingredients in each of the notes of each perfume advertised and listed in Edwards's book.

Finally, how were we to cope with the language of perfume advertising? Granted, we could quickly discard all those advertisements that claimed to be no more than 'the new feminine fragrance'. But how were we to make sense of phrases as different as, on the one hand, 'Don't imitate. Innovate' (*Hugo Boss*) and, on the other, *Sui Dreams* (Anna Sui), 'Who needs the sable?' (*Sand & Sable*), and 'Paris je t'aime' (*Paris* by Yves Saint Laurent)? What classification of words and metaphors would prove to be most appropriate? Was it possible to be consistent in such a classification?⁹

In the end, we came up with 18 overarching categories: beauty, the body, emotion, fantasy, femininity, freshness, (pseudo?) individuality, inner self, (romantic) love, luxury, name, nature, perception, seduction, skin, sensuality, time, transformation, and un/dress. I have to admit to not being entirely satisfied with these categories and have the feeling that they need to be further refined. Whether they will be reduced to the six categories of elegance/class, sensuality/sexuality, power/strength, romanticism/love, solitary gratification, and family suggested by Hubbard (1994) in her analysis of men's fragrances; to the four main categories of sexuality, naturalness/simplicity, luxury/originality, and romance (plus their 14 subdivisions) outlined by Papanthymou (2003); or to the four categories of romanticism/love, sensuality/sexuality, avant gardism/modernism and action/dynamism proposed by Velasco-Sacristán and Fuertes-Olivera (2006) is hard to know at present.

The Problem of Olfactory Order

One of the major problems facing all researchers of smell has been that of classification. How should they create order around a sense, both the transmittance and reception of which are so often unanticipated, fleeting, and ill-defined? Philosophers and scientists, even an anthropologist, have found themselves proposing one classificatory scheme of smells after another.

⁹ Here I have to admit to a failure in preparation of the answers to these questions in that I was initially unaware of two articles by Papanthymou (2003) and Velasco-Sacristán and Fuertes-Olivera (2006) that might have helped us in our attempts to form linguistic categories from the keywords used in perfume advertising.

However, as Moncrieff (1966: 211) notes, 'each classification that one looks at seems to have had its conception in some earlier classification'.

These classificatory schemes have been primarily focused on discovering basic smell terms – much in line with, for example, Berlin and Kay's (1969) classification of basic colour terms, although the problem is exactly the opposite: even though the sense of smell is universal, why is its lexicalization so narrow (cf. Saunders 2000: 82). One particular concern of olfactory classifications appears to have been the division between pleasant and unpleasant smells (see Table 1). It is true that our tendency to like or dislike a few smells is 'involuntary, spontaneous, immediate and unambiguous', but it would also seem that we are, for the most part, indifferent to many smells (Moncrieff 1966: 208). Nevertheless, in his exhaustive study of myths, the anthropologist Claude Lévi-Strauss (1970: 177) noted that there are 'two kinds of stench: one caused by prolonged exposure to fire; the other by prolonged immersion in water.' These are smells of burning and decay, mediated by putrefaction. These three states of decay, the raw and the cooked are found in several classificatory systems, as we will now see.

The classification of odour quality goes back to the Greek philosopher, Aristotle, in European, and to the Chinese theory of Ying-Yang in Asian, civilizations, both of which resorted to five class categorizations. On the basis of an assumption that there was a connection between taste and smell, Aristotle (1936: 250-1) assigned four of the same qualities to each sense, with the addition of *fetid* in smell to match *bitterness* in taste.¹⁰ Another Greek philosopher, Theophrastus (1926), was intimately acquainted with perfumery, botany and cuisine, and was in all likelihood the only ancient philosopher with sufficient credentials to come up with an adequate classificatory scheme. However no written record is left of the classes – said to be seven – that he devised.¹¹

Early European classifications of smells came into their own in the 18th century, mainly as a result of the burgeoning interest in universal systems of classification of natural objects in general, but in particular of plants (themselves used in both medicine and perfumery). In 1763, Albrecht von Haller introduced a simple tripartite division of smells into *pleasant odours* (musk, camphor, mint, apple, violet, rose); *odores medii* (wine, vinegar, absinthe, and burnt smells); and *fetid odours* (including animal perspiration, corpses, and so on) (Dubois 2006: 92). A year later in 1764, the Swedish botanist, Carl Linnæus, introduced a new seven-class scheme consisting of

¹⁰ My own reading of Aristotle finds that he used the following words: *drimêia* (pungent), *glukêia* (sweet), *austeràì* (harsh), *struphnaí* (astringent), *sapràs* (fetid), and *pikròus* (bitter). We also find the word *liparaí* (rich) used to describe a smell.

¹¹ My own analysis of the language used by Theophrastus in his *Enquiry into Plants and Minor Works on Odours and Weather Signs* suggests that, to some extent at least, he followed Aristotle. Categories common to those found in Table 1 include: astringent (*stuptikà, -on*), bitter (*pikrôn*), pungent (*drimêia*), putrid (*sapróties*), sour (*oxútieta*) and sweet (*glukêia, -on*). To these may be added, as a possible seventh class, biting or mordant (*dietiká*).

aromatic, fragrant, ambrosial, alliaceous, hircine, tetri (?), and *repulsive/nauseous*. This was followed 14 years later by Lorry's five-class scheme, based on the volatility and tenacity of odours, but also on their pharmacological effects (calming, narcotic, anti-spasmodic, and so on). These classes were: camphor-like odours, narcotic odours, ethereal odours (associated with certain fruits), volatile acids (like citronella), and alkaline odours (onion and garlic). Ten years after this, Fourcroy proposed another five-class system, this time based on the physiochemical properties of particular odours (Dubois 2006: 92-3).

In 1895 (Dubois says 1925), the Dutch physiologist, Hendrik Zwaardemaker put forward a 'new' classificatory scheme that adopted some of each of the criteria previously used: those relating to the source of odours, on the one hand, and to their effects, on the other. To Linnaeus's seven classes he added Haller's *empyreumatic* and Lorry's *ethereal* (Dubois 2006: 93-4). In 1916, Hans Henning decided to reduce these nine classes into six, not entirely distinct, but merging, categories (*spicy, flowery, fruity, resinous, burnt* and *foul*). On the basis of experimental observations of odour similarities among a number of subjects, Henning also created an odour prism as a geometric form on whose surface perceptually similar odours were located. Three years later, in 1919, A. Heyninx put forward another seven-class system (*ethereal, garlicky, acrid, burning, rotten, foetid*). Unlike Zwaardemaker, who divided his nine odour classes into four pleasant and four unpleasant, with one (*garlicky* or *alliaceous*) that could go either way, all but one of Heyninx's classes – like the traditional Chinese Five Elements system – were unpleasant.

Then, in 1927, two chemists, Crocker and Henderson (1927), argued that there were four types of olfactory nerves which were stimulated by different kinds of smell: *fragrant* or sweet, *acid* or sour, *burnt* or empyreumatic, and *caprylic* or oenanthic. They proceeded to assign a numerical figure between 1 and 10 to signify the intensity of each component smelled one at a time in a fragrance. Thus jasmine, for example, was classified as *fragrant*: 6, *acid*: 3, *burnt*: 3-4, and *caprylic*: 3-4. The search for 'primary odour types, was continued by John Amoore, who in 1962 erected a full-blown theory of odour quality based on putative, psychochemical factors whereby he posited that there was a receptor site in the nose that was complementary in size and shape to the molecular structure of each primary odour (Poucher 1959: 63-70; Cain 1978: 203-11).

None of these classificatory schemes has stood up to further scientific testing, in particular the more intuitive approaches of Henning and Amoore. However, several (Zwaardemaker, Henning, Crocker & Henderson) clearly distinguish between odours that are pleasant and those that are unpleasant – in other words, between those that elicit feelings of attraction and aversion (Jellinek 1997: 22-3). A synopsis of the most common classes in each may be found in *Table 10*, where I have tried to bring together the common elements of the different classificatory schemes discussed above.

Although a number of scholars in France (Dubois 2006: 101) are continuing the search for a fully satisfactory classificatory system, the

question inevitably arises: just *whose* smell scapes are we trying to classify? 'Burnt' may make sense to a fireman trying to determine the cause of an explosion, or to a whiskey distiller the flavour imparted by an oak barrel. But it may be of little, or no, use to a doctor, cattle farmer, or nutritional therapist trying to determine the cause of an illness. The same may be said, to greater or lesser degree, of other such categories, which suggests a need for empirical research to determine what kind of language people use to talk about smells in their everyday lives.

At the same time, however, we should ask what the direction of such classifications might be at some time in the future. For example, is it possible to discover a set of 'basic smell terms' of the kind outlined by Berlin and Kay (1969) for colours? In other words, might it be possible to formulate a raw/burned opposition, for example, parallel to that of black/white (dark/cool, light/warm); followed by putrid (red), fragrant or/and aromatic (green or/and yellow), goat-like (blue), and so on? The idea may seem far-fetched at the moment, but it might be worth pursuing, or at least thinking about, but only *after* a lot of empirical research has been conducted to enable us to find out people actually talk about smell in their everyday lives. The trouble with all these classifications is that they seem to be based on individual researchers' predilections, and not on any social reality. Like colour, then, smell should first be seen as 'an ensemble of social relations' with their 'socio-historical and cultural specificities' (Saunders 2000: 93).

The Classification of Perfumes

The classification of perfumes has followed a rather different track from that of odours, since it is primarily concerned to isolate 'fragrant', rather than 'foul', smells. In other words, it has focused on the aromatic, fragrant and ambrosial classes rather than on smells associated with garlic, goat, pungency, burning and decay.

Generally speaking, we may say that perfume classification has proceeded along three distinct lines. One is quite recent and is oriented towards the consumers of perfumes, taking into account the fact that people perceive fragrances differently depending on the context in which they smell them. This system introduces the two dimensions of *weight* and *warmth*, allowing perfumes to be classified according to whether they are perceived to be *heavy* or *light*, and *warm* or *cool*. To these classes can be added other sub-categories like *natural*, *heady*, *sporty* and *sumptuous* (Jellinek 1992). For the most part, this scheme focuses, not on the material origins of different fragrances – in other words, not on their causes – but on their effects (Sperber 1975: 116), although, as we shall see below, the heavy/light distinction can in fact describe objective characteristics of a perfume's molecular structure.

A second classificatory scheme, though soon disproved, is worth mentioning for both its eccentricity and its audacity in terms of synthesizing different sensory experiences, including music and colour. Septimus Piesse

(1867: 37-8) argued that a 'true' theory of odour should be viewed as an 'imponderable agent' acting upon the nervous system in much the same way as colour affects the eye and sound the ear. On the basis of then current research on the perceived analogy between musical scales and colour, Piesse went on to argue that:

'Scents, like sounds, appear to influence the olfactory nerve in certain definite degrees. There is, as it were, an octave of odours like an octave in music; certain odours coincide, like the keys of an instrument. Such as almond, heliotrope, vanilla, and clematis blend together, each producing different degrees of a nearly similar impression... The analogy is completed by what we are pleased to call semi-odours, such as rose and rose-geranium for the half note; petty grain (*sic*), neroli, a black key, followed by fleur d'orange...'

(Piesse 1867: 38-9)

If the musical note 'do' corresponded to blue, 'mi' to red, and 'sol' to yellow, Piesse reasoned, then there was a basis for both euphony and harmony in the combination of musical notes, on the one hand, and (primary) colours, on the other - a 'universal law of harmony' which should, therefore, include other senses such as smell. This led him to propose a 'gamut of odours' designed to parallel musical octaves, according to which individual fragrances were assigned different notes on the musical scale: for example, rose to middle C, with camphor one, and jasmine two, octaves above middle C; while below rose in descending order were geranium, santal (sandalwood), and patchouli (patchouli). In this way he was able to assign 46 of the most commonly used perfume ingredients to a different note over more than six octaves (Piesse 1867: 42-3), although his criteria for assignment of - say - violet to D, one note above middle C, and in ascending order of D notes above, almond, bergamot and citronella, were, to say the least, idiosyncratic and vague since they pertained only to each odour's 'effect on our senses' (Piesse 1867: 41).

Nevertheless, Piesse (*ibid.*) went on to argue:

'If a perfumer desires to make a bouquet from primary odours, he must take such odours as chord together, the perfume will then be harmonious. In passing the eye down the gamut it will be seen what is harmony and what is a discord of smells. As an artist would blend his colours, so must a perfumer blend his scents.'

He then provided 'recipes (ranged from 'bass' to 'treble' notes) which, he claimed, would 'give an idea how to make a bouquet according to the laws of harmony' (Piesse 1867: 44). Thus, a bouquet of chord C contained santal (C), geranium (C), acacia (E), orange flower (G) and camphor (C), while one of chord F musk (F), rose (C), tuberose (F), tonquin bean (A), camphor (C), and jonquil (F).

The remaining two classification systems stem from the perfume industry. The first of these continues to make use of the analogy with music, and is based on a classification of odours according to their comparative volatility. For us to be able to smell a particular perfume or fragrance, it must

pass from a liquid into a vapour state and then travel through the air to our noses. Because natural olfactory materials have different molecular structures, they tend to evaporate at different rates. This explains why, when we spray a perfume onto the inner side of our wrist in a department store, we first smell mandarin and *bois du rose*, for example, followed a little bit later by fragrances like lemon, ginger, and rose otto. Later on still, when the citrus and other scents have evaporated, we become conscious of other underlying fragrances: clary sage and ylang ylang, perhaps, or violet leaves and tuberose. These in turn will be followed by those fragrances that are slowest to evaporate: sandalwood, oakmoss, Peru balsam and vetivert.¹²

This tripartite system as now used is based on chemical analysis and seems to have been first developed systematically in 1930, although results were only published in 1959, on the grounds that they were felt at the time to be 'too valuable for widespread diffusion' (Poucher 1959: 65). By carefully measuring the rate of evaporation of different aromatic substances, Poucher (1959: 71-75, 85-87) was able to classify them according to what he called Top Notes (with coefficients from 1 to 14), Middle Notes (coefficients 15 to 60), and Basic Notes or Fixers (coefficients 61 to 100). Top Notes included limes, coriander, lavender, bergamot, sweet orange and lemongrass; Middle Notes orris absolute, verbena, clary sage, ylang, celery root, neroli, and jasmine and rose absolutes; and Basic Notes angelica root, artificial musks, oakmoss resin, patchouli, santal (sandalwood), vanillin, and vetivert.

While this chemically-based classificatory system represents an enormous improvement on other systems noted above, it is not completely without its problems, as Poucher (1959: 75-6) himself admits. It is possible for an ingredient like ylang ylang, for example, to be raised from middle to top note if used in such quantity as to dominate a fragrance. Similarly, one of the basic (or, in contemporary parlance, base) note aldehydes (C10, 11, or 12) might be raised to a middle, or even top, note according to the percentage used in an intense flowery bouquet. In general, therefore, the rate of evaporation of individual aromatic substances in a complex mixture is influenced by the duration of the evaporation of other substances in the whole.

What is of interest here is the extent to which chemical analysis supports earlier perfumer practices. It has long been known that some olfactory ingredients last longer than others. As Poucher notes (1959: 76), 'the problem of tenacity is as old as scents themselves', and Theophrastus, who was born in 370 B.C., commented both on women's need for lasting perfumes and on which ingredients (spikenard, iris, and sweet marjoram, for instance) lasted longer than others (rose, lily and *kypros*). Indeed, it was practical knowledge of the volatility of different smells that gave rise, from earliest times, to the distinction still made between 'heavy' (*barêia*) and 'light' (*elaphrôn*) fragrances (Theophrastus 1926).

¹² I would hasten to add that these different examples of fragrances do not in themselves, so far as I am aware, make for a perfume that is, or could be, successfully sold on the market.

Lastly, there is a classificatory system which focuses on the material origins, and thus on the causes, of smells (*floral, spicy, animalic*, and so on). One of the earliest to try out such a classificatory scheme was the Anglo-French perfumer, Eugene Rimmel, who placed the aromatic substances then known (about 200 in all, before the introduction of synthetics) into eighteen distinct types. Each type consisted of a number of materials with similar smells: for example, the class of *Musky*, based on *musk*, also included *civet*, *ambroisette seed* and *musk plant*, while that of *Spicy*, which was based on *cinnamon*, included *cassia*, *nutmeg*, *mace* and *pimento* (Rimmel 1865: 9-11).

This principle of grouping odours into classes, or 'families', is the one adopted by the industry today. According to the current classificatory scheme, which was only created in 1984 (and modified in 1990), a perfume is defined and classified according to the 'overriding fragrance concept' that it embodies. In other words, the ordering of smells depends upon metaphorical conceptualization. These concepts have given rise to seven families by which masculine and feminine perfumes are categorized: *citrus* (including bergamot, lemon, mandarin, grapefruit and orange); *floral* (all single flowers including carnation, rose, and ylang ylang); *fougère* (or fern, which is in fact odourless, but which suggests 'a fresh, woodland, lavender odour'); *chypre* (a spicy, powdery fragrance with oakmoss, labdanum, patchouli and bergamot notes); *woody* (including sandalwood, cedar, patchouli and vetiver); *amber* or *oriental* (with 'a soft voluptuous, spicy, musky intensity with sensual vanilla overtones'); and *leather* (a dry, smoky aroma associated with tobacco and birchwood) (Stamelman 2006: 115). Each of these families is further subdivided according to subtle variations: *aldehydic*, *ambery*, *animalic*, *fresh*, *fruity*, *green*, *spicy*, and *sweet*. This enables a perfume like *Diorissimo* to be classified as 'fresh floral', *Opium* as 'spicy Oriental', and *Knowing* as 'woody chypre' (H&R 1999).

This classificatory scheme, at least in its basic form, is probably the one most widely recognized by users of perfume today (in spite of Jellinek's criticism), and it is therefore somewhat surprising to find that it is of such recent origin. Yet its consistency is far from perfect. Although, for the most part, it makes use of the origins of materials to form its classes (*floral, woody, animalic*, and so on), it also resorts to perceived effects (*fresh* and *sweet*), so that categories are not based on a single rationale. Moreover, there is clearly disagreement about how best to classify the fragrances used in commercial perfumes. The H&R-Genealogy, for instance, outlines only four main classes in all: *floral, oriental* and *chypre* for feminine, and *fougère, oriental* and *chypre* for masculine fragrances (H&R 1999). In addition, the product management perfumery department of DRAGOCO, Switzerland, has proposed one hexagon for feminine, and another for masculine, fragrances. The six classes for the former are: floral bouquet, floral-aldehydic, chypre, oriental, floral, and floral-fruity. These, the authors suggest, 'can easily be adjusted to other product segments: deo-colognes, shampoos, fabric softeners, etc.' (Haldimann and Schünemann 1990: 84).

For his part, Michael Edwards (2007) has devised a 'fragrance wheel' with which he structures perfumes into four main classes of *floral*, *fresh*, *oriental* and *woody*. Each of these he then subdivides into, for example, *chypre*, *fruity*, *spicy* and so on, and provides lists of the main ingredients of every perfume brand on the market in an annually updated (and extremely expensive) publication. According to Milotic (2003: 182), the most common terms currently used in odour descriptions are: *floral*, *herbal*, *fruity*, *sweet*, *green*, *woody*, *spicy*, *animal*, *citrus*, and *other*.

Given this combination of the new and the old, of industry-inspired marketing ploys, on the one hand and, on the other, of centuries-old knowledge, whereby the practices of perfumers have depended on traditions handed-down from one generation to the next, we are led to ask three questions. Firstly, how consistent is the assignment of fragrances by perfume marketers to the three classes of top notes, body, and dry-down (to use Jellinek's [1975: 188-9] terminology)? Secondly, given that the composition of a new perfume generally stems from a concept (Burr 2007), does the perfume industry use comparative volatility as a means towards making their products appear more 'scientific' than, perhaps, they are? And thirdly, to what extent do other professionals, for whom – as for wine connoisseurs, flavourists, whisky tasters, chefs, tea and coffee growers, among others – smell is an important part of their work practices, make use of such classificatory systems? Answers to questions such as these would begin to enable a systematic study of actual olfactory language practices, based on a comparison of different professional spheres. In this way, it might be possible to move beyond a description of individualised smell *scapes* to the analytical delineation of a smell *culture*.

Colour and Smell

Those writing about smell have often had occasion to compare odours with colours. It is not quite clear why this should be so, but the comparison between colour and smell may stem from the fact that perfumes have traditionally been associated with flowers (as well as with other plants and certain animal substances). Certainly, the desire to create order out of abstraction by means of a circle is extremely ancient. Rimmel (1865: 8-9), for example, mentions the existence of a 'floral clock', taken from 'an old work on botany', which places the following flowers in temporal order from 1 to 12 o'clock: rose, heliotrope, water-lily, hyacinth, convolvulus, geranium, mignonette, carnation, cactus, lilac, magnolia, violet and pansy.

In this ordering of colour and smell, there have been numerous creations of colour wheels for taste and aroma. We thus find, among others, a beer flavour wheel, a beer aroma wheel, a wine flavour wheel, a wine aroma wheel, a coffee wheel, a chocolate wheel, a maple products flavour wheel, and, perhaps not surprisingly, a fragrance wheel (Edwards 2007). Some of these wheels seem to reflect producers' ways of talking about products (for

example, wine); others seem more geared towards helping consumers identify tastes.

Three points emerge from a comparison of these different wheels for flavour and smell. Firstly, it is by no means clear whether the several dozen words included in each wheel are in fact used by those working in a particular trade, or, if they are, whether professionals in fact group them together in the same ways. (My research on incense blenders in Japan suggests that they need constantly to verify which words fit which smells, in order to be able to work together.) Secondly, there appears to be little correspondence among particular words, or classes of words, across different flavour or aroma wheels. Thirdly, although each of these wheels makes use of a broad range of colours, none of them corresponds to a standard colour wheel in its arrangement of colours. This suggests that aroma, flavour, and fragrance wheels are merely marketing devices that have little practical classificatory value.

Nevertheless, odour congruency in products is important since it generally influences the purchasing decision. But, as we have noted, because smells are difficult to recognize, supplementary cues – like product labels, packaging and colours – need to be brought in to assist consumers. In particular, colour is seen as an important guide in fragrance selection of, for example, soaps, shampoos, and other bath products. A colour that is consistent with a particular odour (such as violet for lavender, or pink for rose) can aid in its identification (Milotic 2003: 184).

We have already noted that, in his early work on *The Art of Perfumery*, Septimus Piesse based his musical gamut of odours on a perceived correspondence between colours and musical notes. According to Field's idea of *chromatics* (1867: 38), these were: *do*, blue; *re*, purple; *mi*, red; *fa*, orange; *sol*, yellow; *la*, green; and *si*, green. Although by no means as systematic as Field's 'chromatics', 'coloured hearing' is not uncommon among composers.¹³ When conducting an orchestra, Franz Liszt would ask surprised musicians to play 'a little bluer' or 'not so rose', while Rimsky-Korsakov saw C major as white and D major as blue. The nearest he got to red was the clear, pink colour of A major. Another composer, Amy Beach, associated C with white, F sharp with black, E with yellow, G with red, A with green, A flat with blue, D flat with violet or purple, and E flat with pink (Day 2005: 22-3).

When we apply Field's chromatics to Piesse's gamut of odours (see *Table 11*), we find virtually no synchronicity between smells and colours. A rose is neither red nor white (nor yellow), but blue; likewise, with geranium. Jasmine, the flowers of which are white, are smelt as blue. Lavender is coloured green, rather than purple; wallflower red, rather than yellow; and sweet pea yellow, rather than rose-coloured, white, or crimson red. Jonquille

¹³ According to one piece of research, almost one in five (18.5%) of people with synaesthesia experience coloured sounds (Day 2005: 15).

is also smelled as yellow, rather than orange; and tuberose orange, not white. Although acacia 'flowers' can be pink, they are also yellow and white, rather than red. The only colours that clearly match the visual appearance of fragrant ingredients seem to be violet and (one variety of) heliotrope (purple), orange flower and magnolia (yellowish-white), mint and peppermint (both green).

Nevertheless, interviews with incense blenders in Japan reveal that they make a concerted effort to equate particular colours with particular smells in the packaging of their products. This attitude – seemingly not found in perfume packaging – coincides with that of Piesse (1867: 357), who long ago noted that the perfumer needs to make toiletries that look, besides smell and feel, good. In order to achieve this, s/he must take into account how best to use colours, which:

'Must be in harmony and appropriate to the article to which it is applied. Thus *Rose* mouth-wash should be tinted of a beautiful blush colour; *Savon de Tridace*, or lettuce soap, is to be coloured green; and so on. The proper occasion to employ colour does, however, in a measure rest with the taste of the *chef* of the laboratory; and so long as the colour of the article is in unison with the idea of its nature, there is no objection to its free employment, provided the colouring matter is of a harmless character when applied to the skin.'

He then provided hints as to how best to colour alcohol, oils, pomades, soap, powders, watery fluids and milks in a variety of colours: green (almond, acacia, parsley, dried spinach), yellow (saffron, palm oil and turmeric), red, rose, violet and mauve (all aniline), reddish brown (rhatany root, red sandalwood), brown (burnt sugar or molasses), and black (Indian or Chinese ink) (Piesse 1867: 358-364).

More recent studies have shown that the fragrance/colour combination is of crucial assistance to consumers trying to judge the benefits of a particular product, in particular its freshness (Fenko et al. 2009), and that they interpret the complex components of a fragrance differently, depending on the colours in which it is presented. Thus, a green lemon-scented hand washing-up liquid, for example, is perceived to be more natural, fresh and modern than the same scented product coloured yellow. At the same time, however, consumers vary their colour-fragrance associations across products, so that what is true of one instance cannot be extrapolated to another fragrance/colour combination. In other words, because different products have different functions, consumers alter their fragrance/colour associations accordingly. Thus, while a floral fragrance may be perceived as soft in a pink foam bath product, it may be perceived as fresh in the same colour in a laundry liquid. As a result, fragrance/colour associations become difficult to predict (Lewis 1991), although the evidence provided by Lewis suggests that some colours on their own evoke particular associations: pink is associated with rose and floral; green with freshness, herbal and pine; and white with

cleanliness. Blue, on the other hand, has no particular associations attached to it.

This observation is borne out by other research where it is noted that particular colours seem to be more highly associated with particular smells – orange with orange, for example, or lemon with lemon. This means that a cherry-flavoured drink coloured orange will tend to be perceived as orange – rather than cherry-flavoured, although colour cues can bias odour judgements (Zellner and Kautz 1990). In a ‘note for perfume-marketers’ at the end of a section on smell preferences in *The Smell Report*, Kate Fox (199*: 6-7) observes:

‘One of the studies showing our tendency to prefer scents that we can identify correctly also showed that the use of an appropriate *colour* can help us make the correct identification, thus increasing our liking for the fragrance. The scent of cherries, for example, was accurately identified more often when presented along with the colour red – and subjects’ ability to identify the scent significantly enhanced their rating of its pleasantness.’

Such conditioning, however, may be context-dependent in its effects, for the actual influence of colours on the refreshment, pleasantness, and intensity of beverages, for instance, has been shown to be less than expected and not consistently similar (Zellner and Durlach 2003).

When products are removed from the research aims and methods, and smell and colour are treated in themselves, we find that appropriate colours increase – and inappropriate colours correspondingly reduce – people’s ability to identify smells accurately, as well as their liking of particular smells (Davis 1981; Zellner et al. 1991). The implication arising from this is that there are ‘correct’ colours for different odours. Avery Gilbert and his co-researchers obtained significant colour-smell matches for some, but by no means all colours, with red-purple, red, yellow-red, yellow, and green-yellow hues, although they failed to find any in the range of green, blue-green, purple-blue, blue, or purple. Thus lavender, for example, was perceived to be green, rather than purple or blue (Gilbert et al. 1996). Interestingly, odour intensity appears to have a systematic effect on colour perception: stronger odours are matched to darker colours, lighter odours to lighter colours (Kemp and Gilbert 1997). This is supported in the database, where we find that perfume advertisements for fresh and floral fragrances tend towards use of lighter, and those for woody and oriental fragrances darker, visual tones (see *Table 2*).

These findings have been followed up by Schifferstein and Tanudjaja (2004), who found that their subjects use blackness – in other words, saturation and brightness, rather than hue (Wright and Rainwater 1962) – to distinguish light from heavy odours. Using seventeen different perfume brands, they then tested fragrance and colour on three emotion scales of pleasure, arousal and dominance, and discovered that:

‘The highest ratings were for light colours, especially for (light) yellow, (light) orange, and light blue, whereas the lowest pleasure ratings were for the neutral colours black, grey, and brown. Highly saturated colours such as yellow, orange, red, purple, and green got high ratings for arousal and

dominance, whereas the neutral colours of grey, brown, and white, and light red, received low ratings on these scales.'

(Schifferstein and Tanudjaja 2004: 1259)

Other research has shown that, in the development and testing of a new fragrance, a perfume manufacturer (Givaudan) asked a consumer panel to allocate colours to two fragrances on the basis of the two criteria of clean/freshness and warmth. Results showed that blue, green, aquamarine and turquoise were selected for freshness, and honey, dark green, and brown for warmth (McGee 1991: 55-6). Daniel Milotic (2003: 185) develops a similar schema for a range of colours along the two axes of cool/fresh and warm/serene.

In an attempt to help sales personnel assist their customers in their selection of perfumes, Paul Jellinek (1997: 158-9) provides a more complex range of colour-odour associations by focussing on the perceived effects of opposites. This he refers to as the *odour effects spectrum*, wherein we find that ('anti-erogenous') fresh odours, like benzoin and orange oil, are represented as white; 'calming' odours (like bergamot) as ice-blue; 'narcotic' odours (like rose oil) as ultramarine; 'sultry' odours (like jasmine) as violet; 'erogenous' odours (including ambergris, musk and castoreum) as red; 'stimulating' odours (such as oak moss, vetiver, and patchouli) as yellow. These last two categories of odours he also classifies as 'exalting' or orange.

In conclusion, however, we should note that none of the world's languages classifies smells in a comparable way to how they classify colours (Sperber 1975: 115). Colour categories like *rose*, *orange* and *purple* are used without necessarily evoking the flower, fruit or dye respectively. This is not the case with olfactory categories where 'metonymy remains active and infallibly evokes cause or effect' (1975: 116). Colour terms can be organized hierarchically (primary colours and secondary colours, and categories and sub-categories like red and vermilion, or blue and indigo) and linked through in/compatibility (blue-green being possible, but not blue-yellow). The fact that the only possible olfactory classification seems to be that of their causes (floral, animalic, fruity, and so on) suggests that Dan Sperber (1975: 116) is right and that there is 'no semantic field of smells.' Is there anything that can be done about this?

Table 1: Fragrance Family-Model Type Matches

| Family / Model Type | Blonde | Brunette | Black | Red | Other |
|---------------------|----------|-----------|-----------|-----|-------|
| Floral (164) | 41 | 97 | 19 | 4 | 3 |
| Fresh (10) | 5 | 2 | 3 | 0 | - |
| Oriental (35) | 8 | 16 | 10 | 1 | - |
| Woody (55) | 14 | 23 | 14 | 1 | - |

Note: For comparative figures in this and the following tables, multiply Fresh by 13, Oriental by 5, and Woody by 3. In this, and the following tables up to and including Table 9, figures in bold are positively significant; figures in bold italics are negatively significant.

Table 2: Fragrance Family-Visual Tone Matches

| Family / Tone | Light | Medium light | Medium | Medium dark | Dark |
|---------------|-----------|--------------|-----------|-------------|-----------|
| Floral | 12 | 46 | 55 | 36 | 15 |
| Fresh | 0 | 3 | 5 | 2 | 0 |
| Oriental | 0 | 3 | 6 | 13 | 12 |
| Woody | 4 | 10 | 15 | 19 | 7 |

Table 3: Fragrance Family-Colour Matches

| Family / Colour | Greyscale | Skin | Black | White | Red | Green | Yellow | Blue | Brown |
|-----------------|-----------|------|-------|-------|-----|-------|--------|------|-------|
| Floral | 43 | 73 | 37 | 46 | 26 | 8 | 9 | 22 | 0 |
| Fresh | 1 | 5 | 0 | 2 | 0 | 2 | 1 | 2 | 0 |
| Oriental | 5 | 18 | 14 | 1 | 6 | 1 | 2 | 0 | 3 |
| Woody | 10 | 20 | 17 | 14 | 10 | 2 | 4 | 5 | 3 |

| Family / Colour | Orange | Pink | Grey | Purple | Gold |
|-----------------|--------|------|------|--------|------|
| Floral | 0 | 16 | 0 | 7 | 10 |
| Fresh | 0 | 0 | 2 | 0 | 3 |
| Oriental | 1 | 1 | 0 | 4 | 3 |
| Woody | 2 | 0 | 2 | 3 | 3 |

Table 4: Colour/Language (Keyword) Matches

| Colour/ Language | Grey- scale | Skin | Black | Whit e | Red | Yellow | Gree n | Blue | Pink | Purple | Grey | Brown | Gold | Orang e |
|---------------------|----------------|------|-------|-----------|-----|--------|-----------|------|------|--------|------|-------|------|------------|
| Beauty (11) | 4 | 5 | 2 | 1 | 1 | - | - | 1 | 2 | 1 | - | 1 | 2 | 1 |
| Body (13) | 6 | 3 | 2 | 1 | 2 | 2 | 3 | 1 | 2 | - | - | - | 1 | 1 |
| Fantasy (46) | 13 | 20 | 8 | 9 | 6 | 2 | 1 | 9 | 3 | 2 | 3 | 2 | 4 | 3 |
| Femininity (41) | 8 | 15 | 15 | 10 | 8 | 2 | - | 3 | 1 | 3 | - | 3 | 5 | 3 |
| Freshness (8) | 0 | 6 | 1 | 6 | - | - | 3 | - | - | - | - | - | - | - |
| Love (36) | 12 | 15 | 10 | 4 | 2 | 5 | 2 | 7 | 7 | 1 | 3 | - | 3 | 1 |
| Luxury (19) | 3 | 15 | 4 | 5 | 1 | 2 | - | 2 | - | - | - | 2 | 4 | 1 |
| Nature (22) | 6 | 10 | 5 | 8 | 2 | 0 | 2 | 3 | 3 | 1 | 1 | 1 | 1 | 1 |
| Perception (72) | 27 | 29 | 11 | 13 | 10 | 7 | 4 | 4 | 6 | 4 | - | 5 | 8 | 1 |
| Seduction (43) | 11 | 16 | 11 | 12 | 5 | 1 | 2 | 6 | 4 | 4 | 4 | 3 | 1 | - |
| Skin (43) | 16 | 17 | 6 | 5 | 5 | 3 | 2 | 5 | 3 | 4 | - | 1 | 4 | - |
| Sensuality (6) | 1 | 4 | 2 | 1 | 2 | - | - | - | 1 | 1 | - | - | 1 | - |
| Time (49) | 10 | 24 | 11 | 15 | 8 | 2 | 1 | 9 | 5 | 2 | 2 | 1 | 3 | 2 |
| Transformation | 3 | 9 | 7 | 2 | 2 | 2 | - | 3 | 1 | 1 | - | - | 1 | - |

| | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (16) | | | | | | | | | | | | | | |
| Un/dress (14) | 2 | 6 | 7 | 2 | 2 | 2 | - | 3 | 1 | 1 | - | - | 1 | - |

Table 5: Fragrance Family-Language (Keyword) Matches

| Family / Language | Beauty | Emotion | Fantasy | Femininity | Freshness | Individuality | Inner self | Love | Luxury |
|--------------------------|---------------|----------------|----------------|-------------------|------------------|----------------------|-------------------|-------------|---------------|
| Floral | 8 | 11 | 0 | 23 | 3 | 23 | 20 | 21 | 13 |
| Fresh | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 0 | 0 |
| Oriental | 0 | 0 | 8 | 2 | 0 | 2 | 0 | 5 | 1 |
| Woody | 0 | 4 | 7 | 11 | 1 | 5 | 8 | 0 | 3 |

| Family / Colour | Nature | Seduction | Senses | Sensuality |
|------------------------|---------------|------------------|---------------|-------------------|
| Floral | 14 | 29 | 14 | 0 |
| Fresh | 0 | 0 | 3 | 1 |
| Oriental | 0 | 5 | 6 | 3 |
| Woody | 4 | 7 | 8 | 0 |

Table 6:

Table 7a: Olfactory Ingredient-Colour Matches (Base Notes)

| Colour/ Ingredient | Grey- scale | Skin | Black | Whit e | Red | Yellow | Gree n | Blue | Pink | Purple | Grey | Brown | Gold | Orang e |
|-----------------------|----------------|-----------|-----------|-----------|-----------|--------|-----------|----------|-----------|----------|------|-------|----------|------------|
| Amber (99) | 26 | 43 | 25 | 16 | 18 | 4 | 4 | 14 | 11 | 6 | 7 | 5 | 10 | 2 |
| Cedarwood (29) | 5 | 15 | 7 | 7 | 5 | 3 | 1 | 9 | - | 2 | - | - | 3 | 1 |
| Musk (109) | 27 | 50 | 29 | 24 | 12 | 7 | 5 | 15 | 9 | 4 | 4 | 2 | 9 | 4 |
| Oakmoss (47) | 17 | 13 | 14 | 15 | 9 | 4 | 1 | 4 | 2 | - | 3 | 1 | 4 | - |
| Patchouli (55) | 10 | 27 | 24 | 14 | 16 | 3 | 2 | 5 | 5 | 4 | - | 3 | 4 | 3 |
| Sandalwood (123) | 40 | 64 | 38 | 37 | 26 | 8 | 5 | 19 | 13 | 6 | 4 | 2 | 6 | 6 |
| Vanilla (97) | 22 | 48 | 29 | 21 | 18 | 6 | 2 | 18 | 5 | 5 | 2 | 3 | 4 | 2 |
| Vetiver (60) | 24 | 17 | 10 | 8 | 4 | 1 | - | 7 | 5 | 3 | - | 1 | 6 | 1 |

Table 7b: Olfactory Ingredient-Colour Matches (Middle Notes)

| Colour/ Ingredient | Grey- scale | Skin | Black | Whit e | Red | Yellow | Gree n | Blue | Pink | Purple | Grey | Brown | Gold | Orang e |
|----------------------------|----------------|-----------|-------|-----------|-----|-----------|-----------|-----------|----------|--------|------|-------|-----------|------------|
| Iris (42) | 12 | 15 | 11 | 13 | 5 | 3 | 2 | 3 | 4 | 1 | 2 | 3 | 3 | - |
| Jasmine (120) | 37 | 49 | 34 | 27 | 25 | 10 | 2 | 25 | 6 | 4 | - | 6 | 11 | 4 |
| Lily of the Valley (47) | 13 | 18 | 14 | 15 | 6 | 2 | 4 | 4 | 4 | - | 1 | 3 | 3 | 3 |
| Rose (83) | 19 | 42 | 20 | 18 | 15 | 4 | 1 | 15 | 6 | 3 | 1 | 5 | 10 | 2 |

Table 7c: Olfactory Ingredient-Colour Matches (Top Notes)

| Colour/ Ingredient | Grey- scale | Skin | Black | Whit e | Red | Yellow | Gree n | Blue | Pink | Purple | Grey | Brown | Gold | Orang e |
|------------------------|----------------|------|-------|-----------|-----|--------|-----------|----------|----------|--------|------|-------|------|------------|
| Bergamot (85) | 24 | 36 | 23 | 17 | 17 | 5 | 4 | 15 | 7 | 3 | 2 | 3 | 10 | 1 |
| Mandarin (49) | 10 | 29 | 11 | 12 | 7 | 2 | 2 | 8 | 5 | 1 | 2 | - | 6 | 2 |
| Orange blossom (22) | 6 | 10 | 6 | 9 | 4 | - | 1 | - | 3 | 1 | 1 | 1 | 2 | 2 |

Table 8: Season-Overall Tone Matches

| Season/ Tone | Light | Medium light | Medium | Medium dark | Dark |
|-------------------------|--------------|-------------------------|---------------|------------------------|-------------|
| Spring (26) | 2 | 8 | 10 | 6 | 0 |
| Summer (21) | 1 | 5 | 9 | 4 | 2 |
| Autumn (24) | 0 | 3 | 6 | 11 | 3 |
| Winter (73) | 5 | 15 | 21 | 22 | 10 |

Table 9: Season-Individual Colour Matches

| Season/ Colour | Grey- scale | Skin | Black | White | Red | Green | Yellow | Blue | Brown | Orange | Pink | Grey | Purple | Gold |
|---------------------------|------------------------|-------------|--------------|--------------|------------|--------------|---------------|-------------|--------------|---------------|-------------|-------------|---------------|-------------|
| Spring (26) | 7 | 15 | 6 | 11 | 2 | 1 | 0 | 3 | 0 | 0 | 0 | 2 | 2 | 2 |
| Summer | 4 | 9 | 6 | 7 | 3 | 1 | 2 | 2 | 0 | 1 | 3 | 0 | 0 | 2 |

| | | | | | | | | | | | | | | |
|-----------------------|----|----|----|-----------|---|---|---|----|---|---|----|---|---|---|
| (22) | | | | | | | | | | | | | | |
| Autumn (24) | 7 | 12 | 9 | 3 | 4 | 1 | 1 | 4 | 0 | 0 | 0 | 2 | 0 | 2 |
| Winter (75) | 17 | 33 | 22 | 16 | 9 | 5 | 4 | 12 | 1 | 1 | 11 | 1 | 9 | 7 |

Table 10: Common Olfactory Classes (A comparison)

| Classifier | Aristotle | Chinese | Linnæus ¹ | Bain | Zwaardemaker | Henning | Heyninx | Crocker & Henderson | Amoore | Lévi-Strauss |
|-------------------------------|-----------|----------|-------------------------|--------------|----------------------|---------------------|-------------------|---------------------|--------------------|--------------|
| Ethereal | * | * | ethereal | ethereal | ethereal | ethereal/ fruity | ethereal | * | ethereal | * |
| Aromatic | * | * | aromatic | fresh | aromatic | spicy? | * | * | camphora ceous? | * |
| Fragrant | sweet | fragrant | fragrant | fragrant | floral/ balsamic | fragrant | * | fragrant | floral | * |
| Ambrosial | * | * | musk | suffocating? | amber-musk | resinous? | * | * | musky | * |
| Garlicky | harsh? | * | alliaceous | * | alliaceous | * | garlicky | acid? | pepper minty? | * |
| Goatlike | sour? | goat | hircine | * | caprylic/ hircine | * | acid | caprylic | * | * |
| Pungent/ Putrid | pungent | rank | repulsive/ nauseous? | pungent | nauseous? | putrid | * | * | pungent putrid | putrescent |
| Burned | * | burnt | * | * | empyreumatic | burned | burning | burnt | * | burnt |
| Rotten/ Decay ² | foetid | rotten | * | cadaverous | * | * | rotten/ foetid | * | * | decay |

Notes

¹ Both Linnæus and Zwaardemaker included the evaluative classes: *ethereal*, *repulsive*, *nauseous*. Henning equated *ethereal* with *fruity*.

² The category *rotten/decay* has been included, along with *burned*, since it has been argued that there are two kinds of universally perceived stench: 'one caused by prolonged exposure to fire; the other by prolonged immersion in water' (Lévi-Strauss 1970: 177). The Chinese Five Elements associate *rotten* with *water*.

Table 11: Olfactory Chromatics: Fragrance, Sound and Colour (after Piesse)

| Scale | <i>Do</i> | <i>Re</i> | <i>Mi</i> | <i>Fa</i> | <i>Sol</i> | <i>La</i> | <i>Ti</i> |
|----------|-----------|------------|------------|-----------|---------------|--------------|----------------|
| Colours | Blue | Purple | Red | Orange | Yellow | Green | Green |
| Notes | C | D | E | F | G | A | B |
| Middle C | Rose | Violet | Acacia | Tuberose | Orange flower | Vernal grass | Southernwood |
| Treble | Camphor | Almond | Portugal | Jonquille | Syringa | Tonquin bean | Mint |
| ' | Jasmine | Bergamot | Cedrat | Ambergris | Magnolia | Lavender | Peppermint |
| Bass | Geranium | Heliotrope | Orris | Musk | Sweet Pea | Tolu | Cinnamon |
| ' | Santal | Clematis | Calamus | Castor | Pergalaria | Peru Balsam | Stocks & Pinks |
| ' | Patchouli | Vanilla | Wallflower | Benzoin | Frangipani | Storax | Clove |

Appendix 1: Olfactory Incorrectness

In many ways, the anthropological study of smell is a study in taboo since it suggests all sorts of hypotheses or assertions, which in our modern world are deemed to be at best sensitive, at worst politically incorrect. For example, smell is a 'primitive' sense used most overtly by 'primitive' people (Ellis 1928: 51, 84-5). Also, people of different skin colour smell different because of their biological make-up. As a result, it has been asserted that there is 'a decided connection between skin colour and skin scent' (Bloch 1934: 159): black-haired women (or 'negresses') smell strongest, followed by redheads, brunettes, and then blondes (Bloch 1934: 67; cf. Ellis 1928: 59). In addition, it has been held that people smell differently according to the food that they do, or do not, eat.

Smell is also closely related to sexuality and olfactory fetishism. Havelock Ellis (1928: 76) writes: 'there can be no doubt that odor has a certain favourable or unfavourable influence in sexual relationships in all human races from the lowest to the highest'. The relationship between sexual functions, the genitals, and the nose has been studied by oto-rhino-laryngologists (Fabricant 1960),¹⁴ while a large nose has often been associated – rightly or wrongly – with the size of its owner's penis (Ellis 1928: 67; Bloch 1934: 24-5). Both men and women are odorous; their bodies give off a number of different smells – through the skin, hair and scalp, breath, armpits, feet, and private parts – although, in terms of sexual allurements, it is the upper parts of the human body that now have most effect (Ellis 1928: 79). To take one oft-quoted example, secretions from axillary glands are known to attract, while 'armpit stink' used to disqualify a Japanese (among whom strong personal odour used to be uncommon) from joining the army (Ellis 1928: 84, 61; Cain 1978: 202)).

Much has been made, by men, of the 'natural odour of women', or *odor di femina*. In 1886, Augustin Galopin classified women according to their odours: blondes tended to exude what he referred to as 'a very delicate amber odour'; women with chestnut hair had 'a violet odour which appears to be connected with the excretion of the sebaceous glands'; brunettes smelled of 'ebony wood which, during their periods, combines with a light but not unpleasant musk odour'. He went on to suggest that men who loved amber and violet odours were more tender and faithful. As a result, blondes kept their lovers longer than did brunettes, who might be loved passionately but less deeply and permanently (in Bloch 1934: 53).

Jellinek (1997: 114-117) takes this line of thought further by incorporating hair-types in an odour effect diagram, which associates blondes with 'fresh', brunettes with 'sultry', redheads with 'exalting', and brown hair with 'calming' odour effects. In other words, 'narcotic' and 'erogenous' perfumes

¹⁴ For example, it is said that menstrual bleeding may be accompanied, or replaced, by nasal bleeding (Jellinek 1997: 27).

(including such ingredients as balsam Peru, cyclamen, heliotrope and jasmine) are not deemed suitable for blondes, while floral and fruity 'calming' ingredients (lavender, freesia and bergamot, for instance) should not be worn by redheads.

Some of these smells become exaggerated in connection with emotional or sexual states, like menstruation, chastity, menopause, and so on (Ellis 1928: 63-5). It seems that women are generally more accurate in sexual identification through odours (Doty 1985), but they also seem to be less *fixed* than men – a floating olfactory category – since not only do their bodies smell differently during their menstrual cycle, but also when they move from their natal to their spouse's family. They perceive smells more or less acutely according to whether they are ovulating or menstruating, and the smell of a man's armpit – when placed under their pillows at night – can cause members of a sorority or nunnery to synchronise their menstruation period (McClintock 1971). These are not topics that politically correct anthropologists like to think about, let alone voice, although Stoddart (1986) has argued persuasively that the deactivating of advertising signals of sexuality and consequent repression of the sense of smell among humans is to be linked to the development of gregariousness and the threat of matings outside the bonded partnership of the nuclear family.

And yet, in some societies, smell – rather than the visible distinction of appearance, skin colour or behaviour, is the prime metaphor for difference. Smell is a metaphor for group identity, and the 'language' of smell addresses people's concerns about belonging and not belonging (Rasmussen 1999: 63). So, different families have different smells and family members can recognize the smell of their own kin (Porter et al. 1986); foreigners and strangers smell different from native people (Jackson 1998: 181-3). Such difference is extended to gender and race. Women, for example, have been said to be like flowers and smell 'their sweetest at dawn and twilight' (Bloch 1934: 65). Similarly, it has been suggested that there is distinct odour differentiation of Caucasian, Mongolian and Negroid races.

Appendix 2: The Language of Smell

We have already noted that, unlike sight, which enables us to use language with precision, smell is characterized by a 'baffling poverty' of nomenclature to describe it (Locke 1841 [1755]: 65; Engen 1987) other than in terms of its causes (the smell of roses, for example) or its effects (an enchanting smell) (Sperber 1975: 115-119). It is the fact that, in a vast majority of languages, it has no primary olfactory words (Williams 1976), no independent taxonomy, and does not lend itself to mental abstraction, that makes smell seem the 'least intellectual' of the senses (Gonzalez-Crussi 1989:65).

There may be a neuro-physiological fact underpinning both the linguistic 'dead-end' appearance of the olfactory sense (Williams 1976: 473) and the long-held philosophical depreciation thereof (Aristotle 1936: 103-127): when we breathe in, smell passes directly to the limbic system – the oldest part – of the brain whose structure is pre-linguistic (Martin 1999; Plybus and Sell 1999: 1). Smell also stimulates the right, rather than left, hemisphere of the brain, thereby stimulating our emotions, rather than reason (Ellis 1928: 46; Vroon 1994: 89-96; Corbin 1994: 7). This also in part explains the oft-noted fact that odours tend to stimulate memories (Keller 1908; Bedichek 1960: 212-221; Proust 2003: 46-50; Schab 1990; Engen 1991). Following Rousseau and others, smell is the 'sense of imagination' (Rimmel 1865: 11; Ellis 1928: 55; Corbin 1994: 7-8). And yet, we cannot directly invoke a recollection of a smell (if I wish to invoke a smell of a rose, I do so by visualising a rose), although we can make use of its 'extraordinary evocative power'.

In general, the vocabulary that we use to describe smells consists of both descriptive and evaluative words. Thus a perfume may be *fresh, floral, fragrant, smooth, soft, spicy, or sweet*, on the one hand; and *classy, clean, elegant, feminine, refreshing, or sexy*, on the other. However, their usage is not necessarily clear-cut. Descriptive words are at times evaluative, while evaluative words often form part of what purports to be the description of a perfume (cf. Lehrer 1983: 46).

Both Sperber (1975) and Gell (1977) note that there are only two ways to talk about smell. Either we describe it according to the *source* of a particular smell ('*to smell like a rose*' or '*to smell of toothpaste*'); or we describe the *effects* of a particular smell ('*a heady fragrance*' or '*a revolting pong*'). Such effects are usually taken from a non-olfactory context. This means that 'we do not discover the meaning of a certain smell by distinguishing it from other smells (we have no independent means of codifying these distinctions) but by distinguishing contexts within which particular smells have a typical value' (Gell 1977: 27). If we like or dislike a particular smell, therefore, it tends to be because of the context in which we place it, rather than because of the smell itself.

Nevertheless, it is possible, I think, to elicit a lexical structure of perfume based on the following characteristics: *appearance* (which includes colour – both hue and depth), *balance* (or *harmony*), *clarity* (which includes words like

brilliant and clear), *complexity (simple, complex)*, *freshness, sweetness, tenacity*, and *weight (heavy, light)*. Its evaluative terms range across the semantic fields of *beauty, the body, fantasy, femininity, inner self, love/romance, luxury, nature, personality, seduction, the senses, sensuality, time, transformation*, and *un/dress*.

As we shall see, these lexical and semantic categories are by no means clear-cut. The restricted language of smell appears unable to attach itself systematically to the objects to which it refers (Gell 1977: 26). Unlike colours, smells cannot be detached from their referents. As a result of what appears to be our inability to analyse and describe smells, therefore, we resort to symbolic commentary on their absence 'by constructing or reconstructing not a representation of the object, but a representation of that representation' (Sperber 1975: 117). In this respect, then, the conceptual representation of smells belongs to the field of symbolism, which is independent of verbalization and dependent on conceptualization (*ibid.* p.118). As a result, smells are made to take on symbolic qualities. The legend surrounding the Magi's three gifts to the infant Jesus, for example, has given rise to gold being seen to represent royalty, frankincense divinity, and myrrh (derived from the Semitic root and Arabic word *murr*, meaning *bitter* [Groom 1981: 17]) Christ's persecution and death (Groom 1981: 8-9).

Appendix 3: Floral Symbolism

What kind of symbolic qualities, then, do perfumes acquire? For this we need to consider two areas of potential symbolism: one connected with a perfume's ingredients; the other with the colours in which it is packaged and advertised.

Perfumes are composed of numerous ingredients – more than 700, it is said, for Estée Lauder's *White Linen*. Some of these have, by tradition, been 'animalic' (civet, musk, castoreum and ambergris), although nowadays synthetic substitutes are used to obtain the appropriate olfactory effects; others contain the oils of flowers, woods, grasses, fruits, and so on. Of these, flowers are by far the most imbued with symbolism.

Floral symbolism is extremely complex. What holds good in one country's culture may make no sense in another's. In China, for example, it is believed that plum blossom symbolises female chastity since the flowers come out before the leaves (Goody 1993: 363). Much English symbolism has been based on alliteration. At one period, it was commonly held that fennel stood for flattery, daisy for dissimulation, marigold for marriage, rosemary for remembrance, and so on. However, some flowers and plants took on meanings beyond mere alliteration. Rosemary, for example, was also a symbol of immortality; it was thought to bring good luck, to keep thieves away, and to make the old young (Goody 1993: 181).

At the same time, similar symbolism may be attached to different flowers in different civilization. The rose, for example, corresponds to the lotus in Asia, in that both flowers are considered to be close to the wheel in symbolic terms. There is thus a connection between the European seaman's compass-rose and the fact that the lotus' eight petals correspond to the eight compass points in Chinese thought.

Certain colours and forms of flowers may be seen as representing or symbolizing bodily forms and colours. Red, for example, is the colour of blood (as well as of lips and blushing cheeks) and thus symbolizes life and love. It also stands for sensual passion through its association with the colour of fire. The shape of the rose – the reddest of flowers – also symbolizes the female body. Indeed, the curved lines of the closed bud were called 'nymph' in Classical Greek.

The Christian tradition developed and employed a floral code, which relied on sensory symbolism. Roses have symbolized the chalice of life, the soul, the heart and love. Because of their relationship with blood (roses were white until Aphrodite pricked herself on a rose thorn when running to her mortally wounded lover, Adonis, and her blood tinged the flowers sacred to her), and because of a semantic kinship between *rosa* (rose) and *ros* (dew), roses – together with the colour pink – have often been regarded as symbols of mystical rebirth. This explains why roses were placed on graves in Classical antiquity. Roses became a symbol of pure love well before the 19th century when they replaced the Egyptian lotus and Greek narcissus as the flowers of love (Chevalier and Gheerbrant 1996: 813-815).

Violet, on the other hand, being composed of equal proportions of red and blue, symbolizes temperance, clarity of mind, deliberate action, and a balance between heaven and earth, senses and spirit, passion and reason, love and wisdom. It lies directly opposite green (the colour of spring and life) and so stands for autumn. It is the colour of secrecy since it veils the invisible mystery of reincarnation and transformation, and this death symbolism led to violet becoming in Western society the colour of (half) mourning. Because it softens the blaze of red, violet is also the colour of appeasement (which is why bishops wear violet vestments), as well as of modesty and delicacy. Their 'sweet, entrancing odour' has been said to suggest 'a latent sexuality that awaits arousal' (Jellinek 1997: 59). In the Far East, violet is associated with women and sexual intercourse (Chevalier and Gheerbrant 1996: 1068-9).

The lily, on the other hand, was said to stand for virginity because of its whiteness and sweet scent (Classen 1993: 20), and we might note that, in English, virgins are 'deflowered'.¹⁵ However, the flower itself possesses a 'radiant, sultry odour' (probably because of the presence of indol and dihydrocinnamic aldehyde), which is somewhat inappropriate to its symbolism. This leads Jellinek (1997: 63) to suggest that there may be a deeper psychological reason underpinning the choice of lily as a symbol of purity and innocence:

'In an erotic context, purity, innocence and virginity are valued and are more attractive only if they hint, at the same time, at dormant sensuality and are not the result of inner frigidity, absence of feeling, or soullessness. The white colour of the flower symbolizes the virginity of their body, their scent makes us think of their soul.'

Following the growth of the market for flowers in Europe, there emerged a 'language of flowers' in the early 19th century. Books on this subject were often instructions in morality, as well as botany, for Ladies: a rose meant 'love', a violet 'modesty' (Goody 1993: 237-251). In Victorian England, a red rose signified 'I love you', and women used pot-pourries, sachets, scented stationery, gloves, handkerchiefs, and so on to carry on 'a discreet but intimate romantic discourse. In a society in which there were so many things which one was not allowed to see or say or touch, perfumes were heavily charged with hidden meaning' (Classen 1993: 32). Such flowers were then matched with colours, so that red meant 'love' and white 'innocence' and 'virginity' (paralleling the symbolism of the lily).

This floral-colour matching is by no means consistent, however, since a counter-language emerged in the poetry of Mallarmé and Baudelaire. In this respect, although the meanings of flowers are densely polysemic – as the red rose for socialism attests (Goody 1993: 292) – in Jack Goody's opinion (Goody 1993: 237-251), the language of flowers may be seen as a deliberately created piece of 'fictive ethnography'.

¹⁵ And 'in full flower' means ready for love, while 'fading flowers' signify the end of love (Jellinek 1997: 47).

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