The Psychology of Perfume: Art vs. Science Commentary

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Olfactology, or the scientific study of olfaction, is complex; and among other applications, it serves an especially important role in media advertising. Knowing the proper mix of notes and how they titillate consumers' olfactory organs is essential in order to communicate with the public in a provocative manner and, in turn, make a marketed product more lucrative.

Certainly, many "noses" in the perfumery business are cognizant of these technical and "consumerism" angles, and this article will provide commentary on both. It will consider: Why do fragrances delight consumers? And what does this illustrate, empirically, about the personality of patrons who buy into fragrance ads?

Science and Emotion

Perfumers, sensory scientists and even some inquisitive consumers—i.e., those unmoved by unscrupulous marketing, have expressed interest over the emotional effects of fragrances. Wyburn et al.[1] explained how smell can trigger a memory. Moreover, Herz[2] explored how odors may associate with emotion, and later, how this may mold behavior.[3,4] Jansson-Boyd[5] also echoed this notion, stating "odors … have the ability to trigger memories and associations that will make us view certain things in a positive or negative manner."

As Edwards[6] explains, at the beginning of olfaction, odor molecules are transmitted through nasal passages, connecting with millions of specific olfactory sensors. The cells therein are replete with various receptors, each responding to groups of different smells. Information regarding the scent is then forwarded to the limbic system, the section of the brain responsible for mood, which according to Edwards, also "…influences… hormonal, metabolic and stress responses and is the emotional center for sexual desire, rage, fear and joy."

VandenBos[7] describes the limbic system, including the hippocampus and amygdala, as being involved in visceral and autonomic processes. Herz[2] adds there are but a couple of synapses separating the olfactory nerve from the amygdala, which is a crucial part of the brain, instrumental to experiencing and expressing emotion.[8] Further, just three synapses separate the olfactory nerve from the hippocampus, which is paramount to selecting and transmitting memory information.

Perception and Art

Taking in a scent, individuals create associations; i.e., they experience associative learning.[2] Those perceived as pleasing are based on congruence, akin to say a proper color for a given scent or taste. Those perceived as unpleasant are incongruent, such as something yellow paired with a grape taste or smell. Thus, consumer experiences relate to both the expectation of a scent, based on such previous connections made with it, as well as verbal primacy, or suggestions made regarding what effect a scent will have; mollifying tension, for example.

Sanchez[9] called perfumery the least appreciated and comprehended of the arts, noting serious writing on it has been relegated to ad writers and aromatherapy scientists. As for aromatherapists, Sanchez referred to Buckle,[10] who described aromatherapy as being capable of physically relaxing and/or changing the perceived pain of the user. Further, pertinent perfume oils such as lavender, for which individuals historically have developed an affinity, can impact the hippocampus and amygdala, triggering emotions and memories.

Influencing Behavior

However, Sanchez,[9] along with van der Watt and Janca,[11] also noted there is no empirical evidence of these effects or that aromatherapy has curative properties, save for pleasure one enjoys by sniffing a fragrance they subjectively enjoy. Sanchez remarked that "smell psychologists," and uncritical journalists enamored with their sagacity, employ adjectives such as *primitive* and *mysterious* to describe scents. She also opined it has become vogue in "fiction" pop psychology books to proclaim human behavior, particularly sexual, as akin to animal instinct—and naturally difficult to suppress, since it's biology.

As a corollary, Sanchez incredulously alluded to similar evolutionary psychology findings regarding human desire and biases. These explain that human behavior and cognition can be seen via a Darwinian construct; i.e., through natural selection, and adapting to one's environment and intellectual confrontations,[7] which also ring of an animalistic etiology.

As for scent preferences, Sanchez theorized that people prefer one fragrance over another due to aesthetics. However, another view based on hormic psychology is described by VandenBos.[7] He affirms that "… with instincts serving as the primary motivation for behavior [and explanation for] social psychological phenomena," fragrance could instead be influencing the consumer's choice based on the moment when a scent is realized in a social setting, which informs their decision.

Scent Personality

Further complicating the behavior of fragrance consumers is advertising that endeavors to "know what they like," using descriptive terms casual buyers may not understand; e.g., *chypre*, *fougère*, etc. In attempts to make connections between scents and consumers, style magazines often use questionnaires. Malott,[12] for example, explored four personality types and their matching scents.

"The Foodie" is one persona, described as "gourmand" and suited to the eclectic, challenging and spiritual; in addition to being "home-loving." Subsequently, related scents for this type could be ensconced in a young psyche, so dessert-like fragrances, taking the wearer back to their grandmother's kitchen, are a match. As a result, the iconic spritz recommendation is "Angel" by Thierry Mugler, from 1992, which Sanchez rated five stars. Though one may ask: Does every woman who dons "Angel" reflect the personality description purveyed here? And wear it for the reasons outlined? Perhaps.

The other three types are: "The Romantic," who prefers floral scents; "The Nature Lover," who prefers oceanic/citrus scents; and "The Hedonist," who prefers oriental/spicy scents.

In women: Mensing and Beck[13] reported a psycho-physiological correlation between personality and fragrance, citing Klages and Klages (1967), Koelega (1970), Hacke (1975), Van Toller (1978), Dodd and Van Toller (1983), Mensing (1983) and Steiner (1986). Mensing and Beck studied 270 German women, who answered personality questionnaires and tried four different samples of fragrance. They were then tested for mood with Melcher's Color Pyramid Test to ascertain extraverted and introverted tendencies, as well as emotionally stable and ambivalent moods. The Luscher Color Test also was employed to track their emotional tendencies.

Results indicated extraverted women preferred fresh fragrance notes. Introverted women liked oriental notes, and emotionally ambivalent women chose floral powdery notes. Emotionally stable women had no penchant for any note. However, the reverse could have verisimilitude; i.e., that wearing a specific scent could impact personality by making a shy person more audacious when they "go out." It's similar to wearing certain clothes to feel more attractive, or to make a statement.

In relation, Herz[14] showed that a woman's perfume selection can positively affect her mood. Further, a scent can aromatically affect others' perceptions of her personality. This happens all the time in the environment; in fact, Jansson-Boyd[5] reported that "different types of odors can make people perceive environments and products in a particular way." Also, altering the smell of a shampoo or soap dramatically impacts how the product is perceived, even if its function and quality remain unchanged.[15]

In men: In men, Bradley[16] focused on five clothing color combination preferences, their matching wearers' personas, and the fragrances related to each. Applying these combinations, if the present author were to wear bright greens (which I do not), and black and greens (which I sometimes wear), his type is "greens" (which it is not). So, Bradley would recommend the fragrance "Grey Flannel" by Geoffrey Beene (which, yes, I actually have used); in fact, Grey Flannel is among this author's all-time favorite colognes—which biophysicist and writer Luca Turin gave five stars.

Interestingly, while the present author has worn and sprayed everything listed by Bradley at different times, it is worth conveying there was much veracity in the described personal preferences, in both the sartorial and olfactory sense. While no actual statistics are available, this anecdote is serendipitous and worthy of examining. After all, it could all come down to what one is indoctrinated with through media; i.e., if one has a penchant for earthy-colored clothes, maybe they would be led to believe that what combines best with them is a woody cologne.

Finally, the psychological matching of fragrance to desire and personality—as advocated by style questionnaires, along with Mensing and Beck—is acquiring scientific momentum. Sundry, scholarly books are available on the market, such as those penned by cognoscenti including Turin,[9] who happens to be a Ph.D. in biophysics, an olfactory scientist, and author of the acclaimed *The Secret of Scent* (2007). The fragrance industry, via media, also capitalizes on this momentum by artistically, sometimes spuriously, marketing an aura for new fragrances they design for consumers.

Conclusions

As a perfumer, Sanchez[9] attested that making a perfume is solely an art, not a science. However, the ad writers, aromatherapists and pop psychologists into which she delved were not, admittedly, scientists.

From this author's view, based on everything discussed herein, perfumery is both an art *and* a science. Certainly perfumery is an art, creating harmony and tension using diverse notes to instill an overall "mood." Yet, combining chemistries purveying certain notes to achieve results is science guiding art—especially considering the chemicals mixed require safety testing to ensure they are not noxious.

Fashion fragrance production continues, utilizing the latest technologies. Together, fragrance notes make the whole mélange, much like a delicious and uncommon recipe, to intrigue the consumer. Some fragrances are like fine wines and superior to others—not merely due to preference but because the notes comprising them work together without conflict.

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