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THE VISUAL SCENT: GRAPHIC AND TYPOGRAPHIC REPRESENTATIONS IN TURKISH COLOGNE PACKAGING

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ABSTRACT

This study analyzes the visual and typographic elements used in Turkish cologne packaging, examining how brands visually represent different scents. Through a content analysis of design components such as background style, color, imagery, typography, and graphical structures, the study aims to identify current trends in scent representation within packaging design. A dataset of 83 cologne products from 17 brands is systematically categorized to map out contemporary approaches to scent-based visual representation. Findings indicate a predominant reliance on solid backgrounds (50.6%), illustrative imagery (81.1%), and geometric shapes (78.6%), with sans-serif typography (52.2%) being the most common choice for scent names. Brands demonstrate two primary visualization strategies: aligning their designs with the scent itself or maintaining a consistent corporate identity across various fragrances. By mapping how scents are visually expressed in Turkish cologne packaging, this study provides insights into the role of visual representation in fragrance perception and contributes to the understanding of contemporary design practices in scent-based product packaging.

Keywords: *Olfaction, Packaging, Cologne, Typography, Graphic design.*

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GÖRSEL KOKU: TÜRK KOLONYA AMBALAJLARINDA GRAFİK VE TİPOGRAFİK TEMSİLLER

•Dr. Öğr. Üyesi İPEK TORUN*

ÖZET

Bu çalışma, Türk kolonya ambalajlarında kullanılan görsel ve tipografik unsurları analiz ederek, markaların farklı kokuları nasıl görselleştirdiğini incelemektedir. Arka plan stili, renk, görseller, tipografi ve grafik yapılar gibi tasarım bileşenleri üzerinden yapılan içerik analizi, kokuların ambalaj tasarımında nasıl temsil edildiğine dair mevcut eğilimleri belirlemeyi amaçlamaktadır. Çalışmada, 17 markaya ait 83 kolonya ambalajı incelenerek kokunun görsel temsiline yönelik tasarım yaklaşımları sistematik olarak kategorize edilmiştir. Bulgular, düz renk arka planların (%50,6), illüstratif görsellerin (%81,1) ve geometrik şekillerin (%78,6) yaygın olarak kullanıldığını göstermektedir. Ayrıca, sans serif yazı tiplerinin (%52,2) koku adlarında en yaygın tercih olduğu belirlenmiştir. Markaların, tasarımlarını ya doğrudan kokunun kendisini yansıtacak şekilde ya da farklı kokular arasında tutarlı bir kurumsal kimlik oluşturacak biçimde geliştirdiği gözlemlenmiştir. Bu çalışma, Türk kolonya ambalajlarında kokunun görsel olarak nasıl ifade edildiğini haritalandırarak, koku temelli ürün ambalajlarında görsel temsilin rolüne dair içgörüler sunmakta ve çağdaş tasarım uygulamalarının anlaşılmasına katkıda bulunmaktadır.

Anahtar Kelimeler: *Koku algısı, Ambalaj tasarımı, Kolonya, Tipografi, Grafik tasarım.*

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1. INTRODUCTION

The perception of one's surroundings begins with sensory input. Information from the environment is detected by sensory receptors and subsequently interpreted to assign meaning to external stimuli. Among the senses, vision appears to be the most dominant. However, the sense of smell is uniquely linked to the respiratory system and is the only sense that humans have minimal control over and it is nearly impossible to entirely suppress the ability to smell. (Ackerman, 1990: 6). For instance, colors are perceived based on variations in wavelength and intensity, allowing humans to differentiate approximately 10 million distinct shades. In contrast, the human olfactory system is capable of distinguishing more than one trillion different scents (Bushdid, Magnasco, Vosshall, & Keller, 2014: 1370). Despite this, vision often takes precedence in interpreting sensory information, influencing how scents are identified, categorized, and even experienced.

2. The Role of Olfaction in Human Perception

The connection between olfaction and memory is particularly strong and direct. In the brain, stimuli from each of the five senses follow distinct neural pathways. Sensory information is transmitted from the peripheral nervous system, which serves as a communication channel, to the central nervous system, responsible for processing and interpreting signals. While most sensory information is relayed to the cerebral cortex via the thalamus, the sense of smell bypasses this structure and is sent directly to the olfactory bulb. This unique neural processing may explain why olfaction is often referred to as the "memory sense".

In line with this, Engen's earlier studies (1982) suggest that recognition of odors declines at a slower rate compared to image recognition. Supporting these findings, Chu and Downes (2000) and Willander and Larsson (2007) demonstrated that scents have a distinct capacity to trigger older memories. The retention of olfactory experiences in long-term memory has been found to be superior when compared to visual and verbal memory storage (Engen, 1982: 111).

Olfactory perception is shaped by experience, memory, and cultural influences, rather than solely by biological mechanisms. Classen, Howes, and Synnott (1994:4) emphasize that scent perception extends beyond the physical sensation of odors, as it is deeply intertwined with past experiences and emotions. Müller and Lamparsky (1994) identify four levels of scent communication: biological (e.g., pheromones, menthol), archetypal (e.g., floral scents associated with femininity), cultural (e.g., national fragrance preferences), and individual (e.g., personal memories). Engen (1982:172) further explains that odor descriptions are shaped more by personal experience than by neurophysiological

processes. For instance, the same scent may evoke pleasant nostalgia for one person while triggering distressing memories for another. As a result, scent perception remains highly subjective and variable across individuals and cultures.

2.1. Naming of Scents

Unlike many other senses, most languages lack specific terminology for smells. When describing scents, people often rely on metaphors or borrow vocabulary from taste, using terms such as sweet, pungent, or bitter (Classen et al., 1994: 109). In contrast, taste is explicitly named and defined. Similarly, colors are systematically categorized and coded, allowing precise identification within a spectrum. For instance, the Pantone Solid Catalogue includes 187 distinct shades classified under the yellow category. However, the naming of smells remains largely non-definitive.

In English, there is a diverse lexicon for referring to both the sense of smell and its related molecules. Terms such as scent, fragrance, and aroma are generally associated with pleasant smells, whereas odor or smell often carry negative connotations. The term olfaction is used more broadly to refer to the act of smelling. Aroma, another term borrowed from the vocabulary of taste, denotes a distinct and typically pleasant scent, often related to food or flowers. Fragrance, by contrast, is primarily used to describe non-edible substances.

Different cultures and languages employ various methods for naming scents. While the English language lacks original words specifically for scents, certain languages, such as Chinese, incorporate olfactory meanings within their broader linguistic structure. Due to the multilayered nature of Chinese characters, a single word may simultaneously convey a scent-related meaning. Classen, Howes, and Synnott (1994:119) describe this interconnectedness as "In traditional Chinese thought, for example, odours correspond to flavours, and flavours correspond to colours, which in turn correspond to musical tones, and so on". Similarly, some languages spoken by ethnic groups in countries such as Cameroon and Senegal contain specific vocabulary for describing smells (Classen, Howes, & Synnott, 1994: 119). However, aside from a few exceptions, most languages tend to name scents based on their source rather than using distinct, standalone terms.

The perception of pleasant and unpleasant odors is also culturally variable. In Colombia, for instance, an unpleasant smell may be described as resembling a "wet dog" or a "wet ape" whereas in Turkey, the term "carrion" is commonly used. In Indonesia, bangkai flower is associated with an undesirable odor, while melati flower is linked to a preferred scent. Cultural preferences further influence attitudes toward specific aromas. Different regions exhibit distinct olfactory inclinations; in oriental cultures, spicy scents are

favored, whereas in Scandinavia, floral fragrances are more common. In Japan, citrus scents are associated with cleanliness. Meanwhile, English preferences have historically been linked to patchouli-based scents, influenced by their use in preserving cotton clothing (Müller & Lamparsky, 1994).

2.2. Classifying Scents

A significant number of scientific and industrial studies have been conducted to classify and name different types of odors. In 1964, John E. Amoore introduced the stereochemical theory, which proposes that the sense of smell is determined by the molecular geometry of odorants, including malodorous substances. According to this theory, similar scents share similar molecular structures. Amoore classified scents into seven primary groups: musky, minty, floral, ethereal, foul, acrid, and resinous. For instance, musky odors have molecules that fit into an elliptical shape, whereas peppermint-scented molecules have a V-shaped structure (Amoore, Johnston & Robin, 1964).

On the other hand, the perfume industry has developed a different approach to classifying scents, focusing primarily on desirable fragrances. When describing a perfume, it is common to reference specific specimens or ingredient groups, using terms such as musky, powdery, floral, green herbs, or woods. However, to define the overall scent profile of a perfume, descriptors like light, sweet, heavy, or spicy are typically used.

In perfumery, a classification system known as the fragrance wheel was first introduced by Austrian perfumer Paul Jellinek in 1949. This system was later refined by U. Harder at Haarman & Reimer in and sensory chemist Ann C. Noble, with further improvements made by perfumery taxonomist Michael Edwards. As a result, the contemporary fragrance wheel is divided into four main categories: floral, oriental, woody, and fresh (Teixeira, Rodriguez, & Rodrigues, 2010)

3. The History of Preserving Fragrances

Fragrances are available in various dilution formats, with the most concentrated version being perfume or extract, which contains 20–40% aromatic compounds. Eau de parfum typically consists of 15–20% aromatic content, while eau de toilette contains 5–15%, eau de cologne 2–4%, and the lightest formulation, eau fraiche, includes only 1–3%. These fragrances are created by blending different proportions of alcohol and water with aromatic compounds. (Teixeira et al., 2010)

Eau de cologne, or cologne, differs from other dilution formats not only in concentration but also in composition. Traditional perfumes are complex blends of multiple aromatic components structured in top, middle, and base notes. In contrast, colognes are typically

composed of monoessences—single-note distillations—and are often considered unisex. Although cologne originally referred to a fragrance based on a single dominant aroma, in contemporary usage, particularly in the United States, the term cologne is frequently used interchangeably with men's eau de toilette.

Fragrance packaging was initially developed with a purely functional and essential purpose: to preserve the delicate nature of scent that contains alcohol ther volatile ingredients. Over time, however, packaging evolved beyond this utilitarian role to serve as a visual medium that communicates and symbolizes the olfactory content within. This transformation reflects broader shifts in design culture, where containers not only protect but also represent the sensory identity of their contents.

3.1. Ancient Fragrance Vessels

The use of aromatic scents dates back to the earliest history of humankind, while the production and application of fragrances as perfumes can be traced to ancient civilizations such as Greece, Rome, Egypt, and Persia. These early perfumes existed in the form of fats and oils infused with the fragrance of flowers, spices, or incense, often achieved through the burning of resin and balsam mixtures. The earliest known perfume vessels date back to approximately 1500 BCE and were produced by the Egyptians. In Mesopotamia, perfume containers were crafted from materials such as clay and, in some cases, a mixture of dung and glass (The Editors of Encyclopaedia Britannica, 1998). These vessels often featured textured surfaces and varied colors (see figure 1).

Figure 1. a) Perfume vessel, Florence, 6th Dynasty. Museo Archeologico Nazionale, Room 1. Retrieved from https://commons.wikimedia.org/wiki/File:Vessel_perfume_Florence_03.JPG (Khruner, CC BY-SA 3.0)
b) Hes-vase, ca. 1353–1336 B.C. Metropolitan Museum of Art. Retrieved from https://commons.wikimedia.org/wiki/File:Perfume_bottle_in_the_shape_of_a_hes-vase_in-

laid_with_the_figure_of_a_princess_MET_DP310890.jpg (CC0)
c) Perfume vessel in the shape of two trussed ducks, ca. 1580–1550 B.C. Metropolitan Museum of Art. Retrieved from https://commons.wikimedia.org/wiki/File:Perfume_Vessel_in_ the_Shape_of_Two_Trussed_ Ducks_MET_DT226129.jpg (CC0),
d) Monkey-shaped faience perfume vessel, ca. 1550–1295 B.C. Metropolitan Museum of Art. Retrieved from https://commons.wikimedia.org/wiki/File:Perfume_vessel_in_ shape_of_a_monkey_MET_ DP228710.jpg (CC0)

The tradition of wearing perfume spread to ancient Greece, where containers were designed in shapes resembling human heads, birds, or other animals. The Eastern Roman Empire further contributed to perfume bottle development through the introduction of glass-blowing techniques. By the 16th century, perfume bottles had become more sophisticated, incorporating materials such as gold, silver, glass, porcelain, enamel, or combinations of these elements.

3.2. Industrialization and Modern Packaging

The Industrial Revolution of the 19th century transformed perfume bottle production, replacing handcrafted methods with mechanical presses for mass production. As scent preservation advanced, so did the importance of presentation and labeling. The collaboration between French glassmakers and perfumers reinforced the practice of designing bottles to reflect a fragrance's identity, a concept still central to perfume branding today (Corning Museum of Glass, 2014). The Industrial Revolution also facilitated the mass production of refined bottles, incorporating printed labels and sophisticated packaging. Advancements in printing techniques, particularly lithography, played a key role in enhancing cologne packaging aesthetics. Aydın (2024:53) emphasizes that lithography influenced not only advertising but also packaging design, strengthening brand identity through rich color palettes and intricate graphic compositions. By the early 20th century, elegant bottle designs became central to marketing, with René Lalique pioneering unique creations (Corning Museum of Glass, 2014). Perfume bottles evolved into artistic objects, with Salvador Dali and Kazimir Malevich contributing to their design.

3.3. The Emergence and Spread of Eau de Cologne

The earliest examples of modern perfumes emerged with the introduction of ethyl alcohol as a solvent for aromatic compounds. Hungarian toilet water (eau de toilette), used in the early 13th century, is widely regarded as the precursor to Cologne water (eau de cologne) as it is known today (Müller & Lamparsky, 1994: 348).

Figure 2.a) Farina Eau de Cologne Flacon (1811). Farina-Archiv.
Retrieved from https://commons.wikimedia.org/wiki/File:1811-Rosoli-Flacon.jpg (Public domain)
b) 4711 Eau de Cologne. Nevit Dilmen.
Retrieved from https://commons.wikimedia.org/wiki/File:Eau_de_Cologne_1280470.JPG (CC BY-SA 3.0)

As a lighter, more affordable alternative to perfume, Eau de Cologne originated in the early 18th century. In 1709, Giovanni Maria Farina, an Italian perfumer in Cologne, created a citrus-based fragrance, naming it Eau de Cologne after his adopted city (Eckstein, 2009). Its simple formula and easy reproduction fueled its rapid spread across Europe. One of the oldest and most enduring examples of Eau de Cologne is The Original Eau de Cologne 4711, developed by Wilhelm Mülhens in the late 18th century. Its production began in Cologne in 1799 and expanded in subsequent years (See figure 2).

Cologne was introduced to the Ottoman Empire in the 19th century, where Sultan Abdulhamid and his daughters favored imported fragrances, particularly Farina's formula. The concept was well received due to its resemblance to rose water, traditionally used for refreshment in Middle Eastern cultures. While Farina's cologne followed a fixed formulation, locally produced colognes in the Ottoman Empire adopted similar dilution techniques. The region's first known national cosmetics manufacturer, Ahmet Faruki, included colognes among his products. Although ingredients, bottles, and labels were initially imported from Europe, local perfumers and pharmacists developed their own fragrance formulas (Şentürk, 2005).

4. Visual Impressions on Scent Perception

Design, in general, is typically experienced through two of the five senses. In graphic design, the primary focus is on sight, with touch also playing a role through paper texture or techniques such as embossing. In some cases, sound is incorporated, particularly in time-based projects. However, design must ultimately reflect a combination of all five senses. Since sensory perception is filtered through an individual's experience, education, and emotions before triggering a response (Keller, 2004:77), the elements presented by the designer are interpreted uniquely by each viewer.

While the perception process occurs beyond the designer's control, engaging multiple senses enhances the communication of information. Ellis (1997:214) emphasizes that perception is most effective when the senses work together rather than separately, forming a unified experience. Similarly, Hara (2009:171) argues that an image is most compelling when it evokes multiple sensory associations, such as texture, smell, or taste, making the viewer's connection to the design more immersive and memorable. In other words, when graphic design crafts an image considering the five senses, the information is more convincingly conveyed by the viewer/receiver.

This perspective is particularly relevant to the graphic design of cologne packaging, where both visual and olfactory elements contribute to a multisensory experience. As Keleşoğlu and Uygungöz (2024:401) suggest, printed materials are not solely meant for conveying information but can also be designed to create an immersive experience. Similarly, cologne packaging integrates graphic design with scent to engage users beyond visual perception, fostering a more interactive and sensory-driven connection with the product.

Visual perception plays a dominant role in shaping both olfactory and gustatory experiences. Blackwell (1995) demonstrates that color significantly impacts odor identification, with mismatched color-odor pairings making scent recognition more difficult. Similarly, Dematté, Sanabria, and Spence (2009) show that visual cues, including both color and shape, affect olfactory discrimination, with color congruency improving accuracy and incongruence leading to interference. These findings suggest that vision can dominate olfactory perception, leading to misjudgments, a phenomenon reminiscent of the Stroop effect.

The influence of visual cues extends beyond olfaction to flavor perception. Zampini and Spence (2012) illustrate that color plays a crucial role in flavor identification, with mismatched color-flavor pairings causing difficulty in recognizing tastes. Additionally, auditory cues, such as the sound of biting into food, shape texture perception, enhancing

attributes like crispness and carbonation. Shankar et al. (2009) further explore how visual and cognitive cues independently affect taste perception, showing that brown M&Ms are perceived as more « chocolate » than green ones, while labels indicating « dark chocolate » increase the perceived intensity of flavor. Their findings reinforce the idea that visual information, whether through color or labeling, strongly shapes sensory expectations and experiences.

Although research on the relationship between typography and olfaction is limited, studies on visual perception suggest that typefaces, like other design elements, carry implicit associations that shape perception beyond their literal meaning. Different typefaces evoke distinct emotional and psychological responses, often at a subconscious level. Serif fonts are perceived as professional and high-quality, while sans-serifs like Helvetica are seen as modern yet somewhat uncreative (Li & Suen, 2010; Tantillo et al., 1995). Decorative typefaces convey playfulness and femininity, whereas bold, geometric fonts are associated with strength and masculinity (Shaikh, 2007; Walker et al., 1986). Similarly, rigid typefaces reinforce authority, while scripts exude warmth and elegance (Shaikh, 2007). Implicit studies indicate that typeface choices influence brand perception, trustworthiness, and user behavior (Velasco et al., 2018; Henderson et al., 2004). While most research focuses on Western contexts, cultural associations also play a key role in shaping typographic meaning, warranting further cross-cultural investigation (Celhay et al., 2015).

5. Methodology

This study employs a qualitative content analysis approach to examine the visual and typographic elements of Turkish cologne packaging, aiming to systematically categorize design choices and identify recurring patterns. By analyzing a diverse range of brands and scents, the study aims to provide an overview of the current design conventions in Turkish cologne packaging.

The content analysis is structured around four key design components. The first category, visual elements at first glance, focuses on the initial perceptual features of the cologne label's design. This involves coding the background style based on whether it is solid-colored, gradient, patterned, textured, or illustrative. Additionally, the dominant color of the overall label is coded using the ISCC—NBS System's basic color categories (pink, red, orange, brown, yellow, olive, yellow-green, green, blue, purple, white, gray, and black), with beige and blue-green included as supplementary distinctions.

The second key category, imagery, is analyzed based on both content and stylistic features. In terms of content, imagery is coded into four categories: product representation,

where the image depicts the main ingredient that defines the cologne's scent; lifestyle imagery, illustrating scenarios related to the product's usage; abstract imagery, which does not directly reference the product; or no imagery, where the label design relies solely on text and graphic elements. From a stylistic perspective, imagery is coded based on whether it is photographic, illustrative, iconic, or abstract.

The third key category, graphic elements, encompasses both shapes and lines, which contribute to the overall visual structure and aesthetic of the label design. Shapes are coded into four categories based on their formal characteristics: geometric, including circles, squares, triangles, and other regular forms; organic, featuring irregular, freeform, or nature-inspired shapes; cultural, incorporating symbols or motifs that carry cultural or historical significance; and none, where no distinct shapes are present. Similarly, lines are coded based on their directional and stylistic attributes into four categories: straight; curved; diagonal; and none, where no discernible line work is used in the design.

The fourth key category, typographic elements, is coded based on four distinct attributes that contribute to the visual and communicative impact of the cologne label. First, typography is analyzed in three separate text categories: the name of the main ingredient, which defines the primary scent of the cologne; the product name, specifically the word « cologne »; and the most prominent typographic element on the label, which is neither of the first two but serves as a dominant visual feature. Each of these categories is coded using a standardized typographic classification system, adapted from Adobe Fonts, which includes serif, sans-serif, slab-serif, script, handwritten, monospaced and graphic (display) typefaces. The fourth attribute analyzed is the number of different typefaces used on the front side of the cologne label. This metric provides insight into the typographic complexity and design consistency across different packaging styles.

5.1 Data Collection

The data consists of a selected sample of Turkish cologne packaging, encompassing a range of brands and fragrance variations. The sample selection follows a purposive sampling strategy, ensuring diversity in brand heritage and fragrance type.

The data for this study was collected in August 2024 through the digital acquisition of product imagery. To ensure a comprehensive selection of cologne packaging designs, three major online retailers in Turkey—Hepsiburada, Amazon, and Trendyol—were systematically searched for commercially available cologne brands.

To maintain consistency in analysis, the search was restricted to monoessence colognes, which feature either a single primary scent or a dominant fragrance that defines the product's name. More complex colognes with blended fragrance compositions or

products with abstract, non-content-related names were excluded. Additionally, brands with fewer than three cologne products were eliminated from the dataset. This criterion was applied to examine whether design choices remain consistent within a brand's product line or vary across different scents.

Following this selection process, the final dataset consists of 83 cologne products from 17 brands. Each brand's product count is as follows: Akçay (6), Bale (4), Doruk (5), Eti (6), Eyüp Sabri Tuncer (6), Ilgaz (4), Kertil Çam (5), Mecit Efendi (4), Meselli (5), Pereja (5), Rebul (6), Refresh (4), Selin (4), Tarihi Ertuğrul (5), Tariş (6), WSCO Works (4), Watsons (4). The dataset covers seven distinct scent categories: lemon (16), lavender (15), tangerine (15), tobacco (13), fig (9), jasmine (9) and lime (6).

5.2 Data Analysis

The analysis was conducted manually using a structured coding system to categorize design elements. Patterns in color schemes, typography choices, and graphic compositions were identified and compared across different brands and scent categories. A comparative analysis was performed to explore visual consistency within each fragrance type and across brands. For instance, the study examined whether lemon-scented colognes predominantly featured yellow and green hues, or whether certain typographic choices were common across brands with similar scents. Findings were then contextualized within existing design research, particularly regarding the dominance of visual perception in scent-related products (Spence & Gallace, 2011). To ensure consistency and accuracy, digital tools were used for color extraction and typographic classification. Datawrapper.de were used for charts visualizations.

5.3. Limitations

Despite its systematic approach, this study has several limitations. The purposive sampling strategy, while ensuring diversity in brand heritage and fragrance types, limits generalizability, as niche or artisanal brands with different design conventions are excluded. Additionally, by focusing on monoessence colognes, the study does not account for packaging strategies in blended fragrances, which may use distinct visual communication techniques.

A key limitation lies in the subjectivity of visual coding. Although a structured classification system and digital tools were used for reliability, human judgment played a role in defining design attributes. Moreover, the study does not incorporate consumer perception data. Future research could integrate surveys or experimental methods to examine how packaging influences consumer expectations and behavior.

The study also focuses solely on bottle labels, excluding outer packaging elements such as box graphics, embossing, or additional branding details, which may impact product perception To ensure consistency, the analyzed cologne packages were limited to those with volumes between 100 and 250 ml. Furthermore, cologne labels were analyzed in a static digital format, disregarding tactile and structural aspects like bottle shape or materiality, which contribute to the user experience.

6. Findings

The analysis identifies recurring patterns in background styles, color choices, imagery, graphic elements, and typography, revealing both consistent design conventions and scent-specific variations. While some brands maintain a uniform visual identity across their product lines, others adapt their packaging to emphasize the fragrance they represent. The following sections present the key patterns observed across these design elements.

6.1. Background Style and Color

Solid backgrounds are the predominant design choice, appearing in 50% of Lemon, 55.6% of Fig, and 46.2% of Tobacco products. Among brands, Eti, Rebul, and Tariş use solid backgrounds most frequently. Gradients are rare, with only Lemon (6.3%) and Fig (11.1%) incorporating them, while Akçay is the only brand to utilize gradients (2 cases). Patterns are most prevalent in Lavender (26.7%) and Tobacco (23.1%), with Kertil Çam and Tarihi Ertuğrul Kahvecisi displaying the highest patterned background usage. Illustrative elements are particularly prominent in Tangerine (33.3%) and Tobacco (30.8%), while Eyüp Sabri Tuncer and Doruk are the brands most frequently employing them. Texture is absent across all scent categories and brands (See figure 3 and 4).

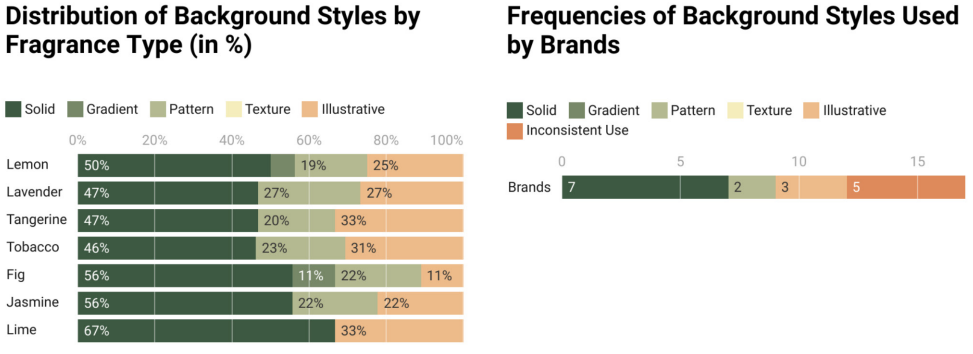

Figure 3. Background Style Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

Figure 4. Label designs for fig cologne. Variety in backgroud style as solids, patterns, gradient and illustration. Retrieved from https://www.hepsiburada.com/ara?q=incir%20kolonyası

In terms of color, Yellow (37.5%) is the dominant background choice for Lemon, while Lavender predominantly features Purple (46.7%) and Blue (6.7%). Tangerine heavily relies on Orange (60%), whereas Tobacco favors Brown (61.5%). Fig presents a more varied palette, incorporating Purple (33.3%), White (33.3%), and Orange (11.1%), while Jasmine exhibits the most diverse distribution, with Blue (22.2%), Pink (22.2%), and Green (11.1%)(See figure 5). Lime is primarily represented by Green Yellow (50%) and Green (33.3%).

Figure 5. Variety of background colors on jasmine cologne labels Retrieved from https://www.hepsiburada.com/ara?q=yasemin+kolonyası

Based on the brands, two distinct strategies reveal: Akçay, Bale, Doruk, Eti, Eyüp Sabri Tuncer, Rebul, Refresh, Vsco Works, and Watsons align their background colors with the scent, frequently using Orange for Tangerine, Brown for Tobacco, and Yellow for Lemon. Conversely, Kertil Çam, Mecit Efendi, Meselli, Selin, and Tarihi Ertuğrul Kahvecisi maintain a consistent color scheme across different fragrances, not using color as an element for ingredient representation (See figure 6).

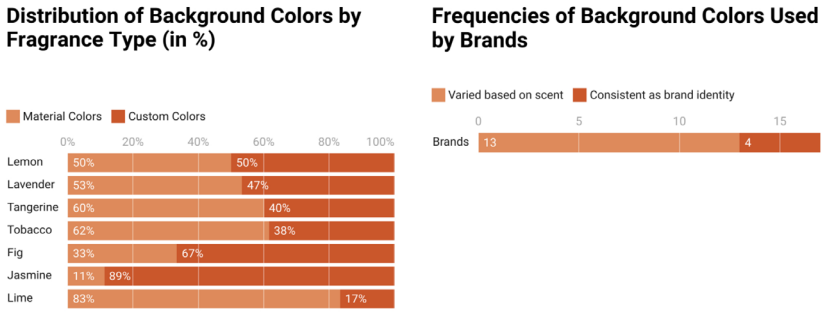

Figure 6. Background Color Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

6.2. Imagery Content and Style

Product imagery dominates cologne packaging, accounting for 75.9% of total imagery usage. It is most prevalent in Lemon (68.8%), Tangerine (73.3%), and Tobacco (84.6%), where the product is frequently represented on the label. Abstract imagery is present in only 10.8% of designs, primarily in Lavender (20%) and Tangerine (13.3%), while lifestyle imagery is entirely absent. A notable 13.3% of labels omit imagery altogether (See figure 7).

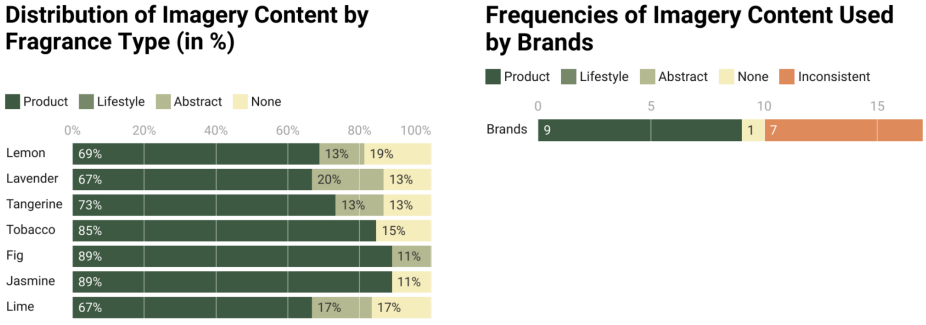

Figure 7. Imagery Content Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

Most brands rely on product imagery, with Akçay, Doruk, Eyüp Sabri Tuncer, Rebul, Refresh, and Tarihi Ertuğrul Kahvecisi exclusively using it. In contrast, Eti avoids product imagery altogether, opting for text-based designs (See figure 8). Kertil Çam and Mecit Efendi stand out for their frequent use of abstract imagery, deviating from the product-focused norm; however, neither brand applied this style across all fragrance types.

Figure 8. Eti Cologne Labels.
Retrieved from https://www.hepsiburada.com/ara?q=eti%20kolonya

Illustrative imagery is the dominant visual style, accounting for 81.1% of designs, particularly in Lemon, Lavender, and Tangerine, where 78.6% of labels employ illustrations. Photography is rare, appearing in only 9.5% of designs, with Jasmine (22.2%) and Fig (11.1%) featuring it most often. Abstract and iconic representations are nearly absent (See figure 9)

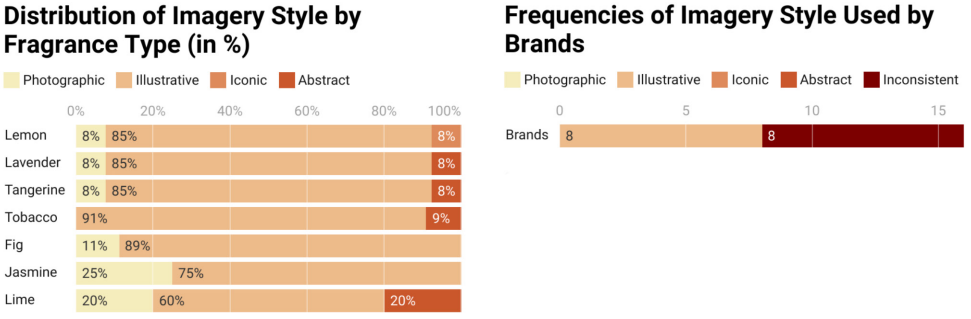

Figure 9. Imagery Style Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

Brand analysis mirrors this trend, with Doruk, Eyüp Sabri Tuncer, Ilgaz, Kertil Çam, Refresh, Rebul, Selin, Tarihi Ertuğrul Kahvecisi, Vsco Works, and Watsons exclusively using illustrations. Akçay includes photographic elements. In contrast, Eti and Mecit Efendi exclude imagery entirely, relying on textual visual solutions. Tariş is the only brand featuring an iconic representation. Among the products examined, brands that employed a consistent imagery style across their range tended to favor an illustrative visual language. While other forms of visual representation appeared sporadically across products, no brand was observed to use them consistently (See figure 10).

Figure 10. Tobacco Colognes. Imagery as illustrations.
Retrieved from https://www.hepsiburada.com/ara?q=tütün+kolonyası

6.3. Graphic Elements: Shapes and Lines

Geometric shapes dominate cologne packaging, appearing in 78.6% of designs. They are particularly common in Tangerine (86.7%), Lavender (80%), and Lemon (68.8%), often contributing to structured and symmetrical layouts. Cultural motifs are used sparingly (12%), mainly in Tobacco (23.1%) and Tangerine (13.3%), while organic shapes are nearly absent (1.2%). 7.1% of labels feature no graphical elements, with Lemon (18.8%) and Lime (14.3%) being the most frequent in this category (See figure 11).

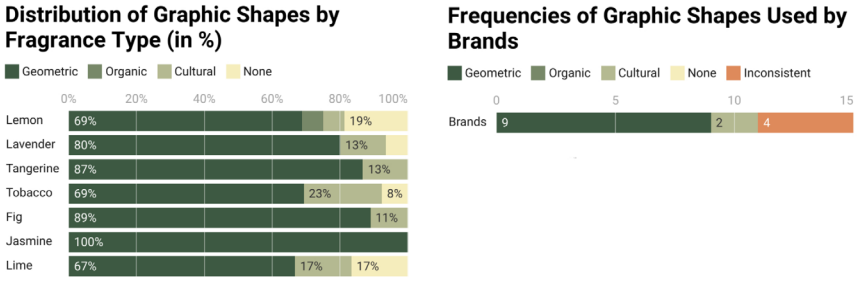

Figure 11. Graphic Shape Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

Figure 12. Kertil Çam Cologne Labels with Cultural Motifs
Retrieved from https://www.hepsiburada.com/ara?q=kertil+çam++kolonyası

Straight lines are the most commonly used graphic lines (66.2%), particularly in Lemon (71.4%), Tangerine (66.7%), and Tobacco (63.6%). Curved lines appear in 37.8% of designs, most often in Lavender (40%) and Tangerine (33.3%), while diagonal lines are rare (4.1%).

Geometric shapes also emerged as the predominant graphic approach among brands demonstrating consistent use of visual form. Brand analysis shows that Akçay, Bale, Doruk, Meselli, Rebul, Refresh, Selin, Tarihi Ertuğrul Kahvecisi, Tariş, Vsco Works, and Watsons exclusively use geometric shapes. Kertil Çam and Mecit Efendi are notable for incorporating cultural motifs, while Pereja includes both organic and cultural elements. Eyüp Sabri Tuncer and Ilgaz mix geometric and non-graphical designs (See figure 13 and 14).

Figure 13. Tarihi Ertugrul Cologne Label examples for geometric shapes and curved lines
Retrieved from https://www.hepsiburada.com/ara?q=tarihi+ertugrul++kolonyası

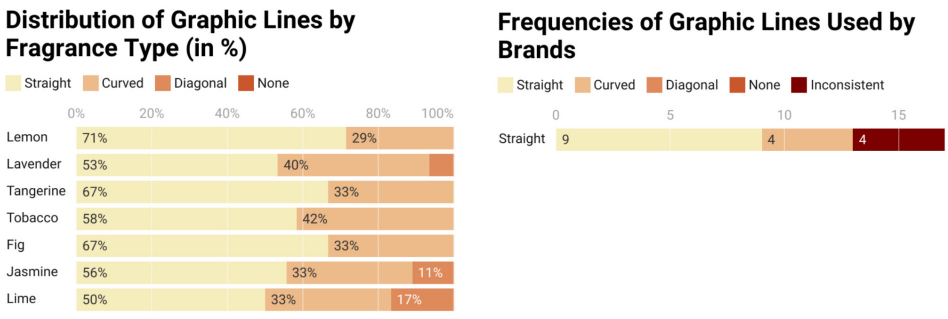

Figure 14. Graphic Line Style Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

6.4. Typography

Across the entire sample, an average of 2.23 different fonts are used per label. Sans-serif fonts are the most common, appearing in 52.2% of scent name typography, especially in Lemon (50%), Lavender (50%), Tangerine (46.7%), and Tobacco (53.8%). Serif fonts follow (31.3%), particularly in Lime (80%) and Lemon (28.6%). Script fonts (19.4%) appear primarily in Tangerine (20%), Fig (33.3%), and Tobacco (15.4%), while slab serifs (7.5%) are mainly seen in Kertil Çam and Selin. Eight brands were found to vary the typeface used for the scent name across different products. Sans-serif fonts emerged as the most consistently applied typographic choice, followed by occasional use of serif fonts (See figure 15 and 16).

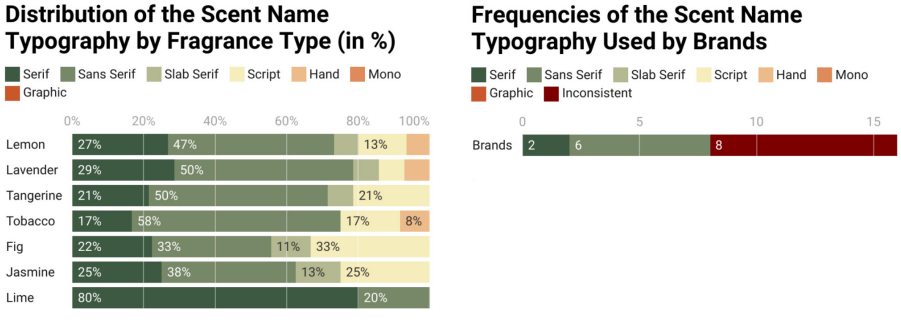

Figure 15. Scent Name Typography Preferences by Fragrance Type and Brand Tendencies
Created by the author using Datawrapper.

Figure 16. Lavender Cologne Labels. Sans serif, serif, hand and script "lavanta" typography. Retrieved from https://www.hepsiburada.com/ara?q=lavanta++kolonyası

For the word "Cologne" sans-serif fonts (42.5%) and serif fonts (38.4%) dominate, with slab serif (8.2%) and script fonts (8.2%) being far less common. Brands like Bale, Doruk, Pereja, Refresh, and Watsons exclusively use sans-serif, while Akçay, Eti, Mecit Efendi, Meselli, and Rebul favor serif fonts. Kertil Çam and Vsco Works incorporate slab serifs, and Tariş uniquely features script typography (See figure 17).

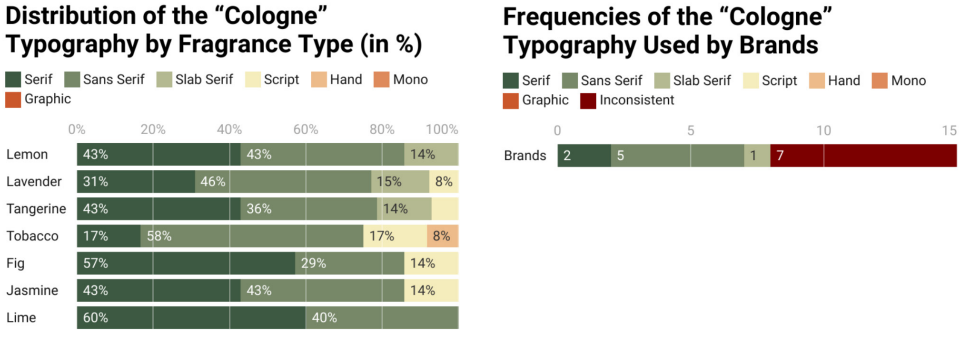

Figure 17. "Cologne" Typography Preferences by Fragrance Type and Brand Tendencies Created by the author using Datawrapper.

CONCLUSION

The findings of this study reveal clear patterns in background styles, color choices, imagery, and typography used in Turkish cologne packaging. Backgrounds are predominantly solid, with a complete absence of textured surfaces, pointing to a preference for flat, modern design trends. Some brands maintain a consistent corporate identity through color usage, while others align their palettes with scent associations—such as yellow for citrus or brown for tobacco—suggesting an intentional visual strategy to evoke olfactory expectations. It was observed that color correspondences were more consistently aligned with the scent material in fragrances such as lemon, mandarin, and lavender. However, in scents like jasmine—where the material's inherent color may not be as distinctly identifiable—a tendency toward light color usage was noted, yet a consistent visual representation was not clearly established.

Imagery and graphic elements further reinforce scent perception. Illustrative visuals dominate the dataset, and product representation appears in 75.9% of the labels. The rarity of photography and lifestyle imagery indicates a reliance on symbolic and abstract representations rather than narrative-driven visual communication. Additionally, geometric shapes and straight lines prevail, emphasizing a structured and orderly design language that prioritizes clarity over decorative complexity.

Typography functions as both a practical and expressive element. An average of 2.23 fonts per label reflects a controlled diversity that avoids visual clutter. Sans-serif fonts dominate scent names, aligning with Li and Suen's (2010) and Tantillo et al.'s (1995) findings that these typefaces are perceived as modern, clear, and unpretentious—qualities that support associations of freshness and simplicity. In contrast, serif fonts convey tradition and reliability, while script fonts—more frequently observed in Tangerine, Fig, and Tobacco labels—correspond to Shaikh's (2007) conclusion that such typefaces evoke elegance, warmth, and a feminine tone. For the word "Cologne," the continued dominance of sans-serif and serif fonts reflects a preference for legibility and classic visualization.

These results support prior findings by Spence and Gallace (2011), who emphasized that vision often dominates multisensory product experiences, and by Blackwell (1995), who demonstrated that mismatched color-odor pairings can impair scent identification. Given the lack of a universally structured linguistic system for olfaction, the findings suggest that packaging design operates as a visual proxy for scent, using color, imagery, and typography to shape consumer expectations.

Finally, the observed variations between ingredient-based visual metaphors and brand-based visual consistency imply that scent perception is not solely biologically

determined, but also shaped by marketing conventions and cultural conditioning. Future research could explore cross-cultural differences in scent-related design, test consumer responses to visual-olfactory congruence, or investigate how people visually interpret scents in the absence of verbal cues. Experimental studies employing user-generated representations of scent may further illuminate subconscious associations between olfactory stimuli and visual perception, offering valuable insights into multisensory branding and packaging design.

REFERENCES

Ackerman, D. (1990). A Natural History of Senses. Random House.Amoore, J. E., Johnston, J. W., & Rubin, M. (1964). The Stereochemical Theory of Odor. Scientific American, 210(2), 42–49. [http://www.jstor.org/stable/24936014]

Becer, E. (2014). Ambalaj Tasarımı. Dost Kitabevi.

Blackwell, L. (1995). Visual Cues And Their Effects on Odour Assessment. Nutrition & Food Science, 5, 24–28.

Bushdid, C., Magnasco, M. O., Vosshall, L. B., & Keller, A. (2014). Humans Can Discriminate More Than 1 Trillion Olfactory Stimuli. Science, 343(6177), 1370–1372. https://doi.org/10.1126/science.1249168

Celhay, F., Boysselle, J., & Cohen, J. (2015). Food Packages and Communication Through Typeface Design: The Exoticism Of Exotypes. Food Quality and Preference, 39, 167–175.

Chu, S., & Downes, J. J. (2000). Odour-Evoked Autobiographical Memories: Psychological Investigations Of Proustian Phenomena. Chemical Senses, 25, 111–116.

Classen, C., Howes, D., & Synnott, A. (1994). Aroma: The Cultural History of Smell. Routledge.

Corning Museum of Glass. (2014, September 2). A Brief History of The Glass Perfume Bottle. Corning Museum of Glass Blog. https://blog.cmog.org/2014/09/02/a-brief-history-of-the-glass-perfume-bottle/

Dematté, M. L., Sanabria, D., & Spence, C. (2009). Olfactory Discrimination: When Vision Matters? Chemical Senses, 34(2), 103–109. https://doi.org/10.1093/chemse/bjn055

Dilmen, N. (n.d.). 4711 Eau de Cologne [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Eau_de_Cologne_1280470.JPG

Eckstein, M. (2009). Farina: Eau de Cologne: Farina's 300th anniversary. Bachem J.P. Verlag.

Ellis, W. D. (1997). A Source Book of Gestalt Psychology. Gestalt Legacy Press.

Engen, T. (1982). The Perception of Odors. Academic Press.

Erdoğan Aydın, D. (2024). Grafik Tasarım Tarihinde Litografinin Rolü Ve Fransız Afiş Sanatının Doğuşu. In Plastik Sanatlar Alanında Baskıresim Üzerine Yaklaşımlar-2 (pp. 49–72). Akademisyen Kitabevi.

Farina-Archiv. (n.d.). Farina Eau de Cologne Flacon (1811) [Photograph]. Wikimedia

Commons. https://commons.wikimedia.org/wiki/File:1811-Rosoli-Flacon.jpg

Hara, K. (2009). Designing Design. In H. Armstrong (Ed.), Graphic Design Theory: Readings From The Field (pp. 169–171). Princeton Architectural Press.

Henderson, P. W., Giese, J. L., & Cote, J. A. (2004). Impression Management Using Typeface Design. Journal of Marketing, 68(4), 60–72.

Hepsiburada. (2024, August 23). Search results for "incir kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=incir%20kolonyası

Hepsiburada. (2024, August 23). Search results for "eti kolonya" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=eti%20kolonya

Hepsiburada. (2024, August 23). Search results for "yasemin kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=yasemin+kolonyası

Hepsiburada. (2024, August 23). Search results for "tütün kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=tütün+kolonyası

Hepsiburada. (2024, August 23). Search results for "kertil çam kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=kertil+çam++-kolonyası

Hepsiburada. (2024, August 23). Search results for "tarihi ertuğrul kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=tarihi+ertugrul++kolonyası

Hepsiburada. (2024, August 23). Search results for "lavanta kolonyası" [Search results page]. Hepsiburada. https://www.hepsiburada.com/ara?q=lavanta++kolonyası

Keleşoğlu, B., & Uygungöz, M. (2024). Fiziksel Etkileşim için Kurgulanan Basılı Çoklu Sayfaların Tasarımı. Sanat ve Tasarım Dergisi, 14(2), 389-409. https://doi.org/10.20488/sanattasarim.1602912

Keller, R. (2004). Emotive Communication Using Mobile IC Devices. In D. McDonagh, P. Hekkert, J. van Erp, & D. Gyi (Eds.), Design and Emotion (pp. 76–81). Taylor & Francis.

Khruner. (2014, January 2). Perfume vessel, Florence, 6th dynasty [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Vessel_perfume_Florence_04.JPG

Li, Y., & Suen, C. Y. (2010). Typeface Personality Traits and Their Design Characteristics. In Proceedings of the 8th IAPR International Workshop on Document Analysis Systems (pp. 231–238).

commons.wikimedia.org/wiki/File:Perfume_bottle_in_the_shape_of_a_hes-vase_inlaid_with_the_figure_of_a_princess_MET_DP310890.jpg

Metropolitan Museum of Art. (n.d.). Perfume vessel in the shape of two trussed ducks [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Perfume_Vessel_in_the_Shape_of_Two_Trussed_Ducks_MET_DT226129.jpg

Metropolitan Museum of Art. (n.d.). Perfume vessel in shape of a monkey [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Perfume_vessel_in_shape_of_a_monkey_MET_DP228710.jpg

Müller, P. M., & Lamparsky, D. (1994). Perfumes: Art, Science and Technology. Springer-Science Business Media.

Noble, A. C., Arnold, R. A., Masuda, S. D., Pecore, J. O., Schmidt, P. M., & Stern, P. M. (1984). Progress Towards A Standardized System of Wine Aroma Terminology. American Journal of Enology and Viticulture, 35, 107–109.

Shaikh, A. D. (2007). Psychology of Onscreen Type: Investigations Regarding Typeface Personality, Appropriateness, and Impact on Document Perception. Wichita State University.

commons.wikimedia.org/wiki/File:Perfume_bottle_in_the_shape_of_a_hes-vase_inlaid_with_the_figure_of_a_princess_MET_DP310890.jpg

Metropolitan Museum of Art. (n.d.). Perfume vessel in the shape of two trussed ducks [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Perfume_Vessel_in_the_Shape_of_Two_Trussed_Ducks_MET_DT226129.jpg

Metropolitan Museum of Art. (n.d.). Perfume vessel in shape of a monkey [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Perfume_vessel_in_shape_of_a_monkey_MET_DP228710.jpg

Müller, P. M., & Lamparsky, D. (1994). Perfumes: Art, Science and Technology. Springer-Science Business Media.

Noble, A. C., Arnold, R. A., Masuda, S. D., Pecore, J. O., Schmidt, P. M., & Stern, P. M. (1984). Progress Towards A Standardized System of Wine Aroma Terminology. American Journal of Enology and Viticulture, 35, 107–109.

Shaikh, A. D. (2007). Psychology of Onscreen Type: Investigations Regarding Typeface Personality, Appropriateness, and Impact on Document Perception. Wichita State University.