Proposition of the 3-block Perfume Exhibition Model

Using technology on turning visible an invisible reality such as perfumes

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Abstract – **Perfumes are part of our daily life. They can be a possible way to express our beauty or they can bring to life some memories or they can be simply hygienical accessories. Hard to describe, impossible to see. Perfumes have some mystical aura above them. For the industry perspective, perfumes present a challenge that is how to turn visible such an invisible, intangible and mystical object. The lineup questions of this study seek to explore the artistic endeavor perfumes can display and the advantages of retrieving data to improve the exhibition and to develop new business models. To develop this theoretical, conceptual and exploratory study one must look at some of the scholars' contributions to this subject and the fragrance exhibitions made to this day. Moreover, some empirical knowledge that helps to understand how value is perceived into modern perfumery is stated; such knowledge comes from previous exhibitions, either fragrance-related exhibitions or immersive-experience exhibitions, and it can be studied and improved from one's empirical experience. The study is aimed to serve as support for a Perfume Art Exhibitions and it will develop a role model for future olfactory art exhibitions. Sensorial experiences and the visitors' embodiment are critical factors for the success of an exhibition; hence this article seeks to propose a new exhibition model, totally oriented for the visitors' needs and expectations but also for the brands' market research and segmentation efforts. The 3-block model can be used for both an exhibition and to a permanent art museum. This model is innovative because it enhances the artistic role of perfumes and it will get visitors to dive into perfumes, gaining vocabulary and exploring the "making of" perfumes.**

Keywords – perfume; fragrance; art; museum; exhibition.

I. INTRODUCTION AND METHODOLOGY

One can define perfumes and fragrances by being synonyms, but perfumes are much more than fragrances: they can be perceived as art pieces [6].

Perfumes are also part of a person's toilette and they are consumed daily. Major companies flourished by setting their business on the creation, development, distribution and sell perfumes as they are supplied as any other commercial commodity.

The purpose of this paper is to draw the lines for a Perfume Art Exhibition. To reach this purpose a qualitative approach [47], [20] with a constructivist methodology [19], [35], [31], [32], [33], [21] and design approach [50], [10], supported on three data sources: literature review, exhibitions' benchmark and empirical knowledge embodied on a previous experiences and life events repository [53].

The first part of the paper is to study all the major contributes given to this subject. Then one must get some examples of exhibitions with similar propositions and analyze them with other fragrance-related shows worldwide. This benchmark will set up the relevant issues that will be addressed on the final part: the proposal of an exhibition model that seeks to explore perfumes as art pieces. Finally, the empirical knowledge will contribute to deliver the proposition of the 3-Block Exhibition Model.

This study is conceptual and exploratory. Conceptual because the problem lies on the concept [24], corresponding to the theoretical exploit in opposition to empirical and mixed experimental knowledge [8], adopting a conceptual approach [10], residing primarily on concepts [34] and as potential foundations to support an investigation through this subject and its materialization into an object [34]. Moreover, this paper suggests a model: the 3-Block Exhibition Model. Exploratory [47] because it is not definitive [11] and seeks, through a progressive and sequential process, to get a primary knowledge of the situation [11], to increase the Investigator's familiarity to the phenomenon [40]; to clarify and define some

concepts [40] and, lastly, to develop a reference map that enables further hypothesis and investigation bundles to this subject [40]. The exploratory study is used on this qualitative research to be a reference map to this theoretical investigation [43].

II. STUDY OF MODERN PERFUMERY: STATE OF ART

In the late 20th century started the first studies on modern perfumery as some creative process that is, somehow, linked to the consumer's taste [48], [5], nesting this creative process both on the fragrance engineering [42], [17], [6], [30] and artistic bottle endeavors [26], [36], [37].

The first decade of the 21st century brought some new insights on conceiving perfumes as art forms [41], [46], [25], the role of advertising into customers' preferences [54], [55], [14], [53].

A perfume starts with an idea, the generator concept, then it is transformed into a liquid, *le jus*, which one can see as liquid magic since this juice is supposed to make us experience this generator concept which is also enclosed on a bottle, usually a very unique one, and a package [13], [17]. The final process of this artistic creation is the advertising where this generator concept is turned into an image. That is the artistic view of a perfume [7].

It is important, on this step, to discuss the definition of scent art as is stated in L. Solay [52]:

Scent art, or olfactory art, refers to artwork which uses a distinctive element of scent to convey its meaning. Such a scent element may be (a) the sole component of the artwork with no other elements visible or audible in the exhibition space, (b) be the major component of the artwork, with individual tangible/audible elements supporting it, or (c) be a supporting (albeit still integral) element of the artwork which aims to further emphasize the artist's concept by complementing the main visible/audible components. the last category raises the question whether any installation or sculpture containing scent subsequently can be defined as "scent art", irrespective of the smell element's conceptual weight. At what point does an installation artwork become a scent artwork? In part due to the lack of critical discourse such has not yet been further defined, and although this question will not be debated here, I prefer to define scent art as any art in which smell carries a most essential role in delivering the artwork's concept.

Other authors focused on the technical aspects surrounding perfumery. The nature of odors has been studied as a way of perception and knowledge [1] or as immersive experiences that ignite emotions [29]

The central issue of this paper is how can I turn visible an invisible reality like Fragrance? One of the most important contributions to this topic was the work by the museum researcher Nieuwhof [38]. In his paper he started by stating that *the main reason why scents are hard to qualify as "real", "factual" and "objective" knowledge is because we lack vocabulary to describe all different aromas* [38]. The lack of

suitable vocabulary to describe scented aromas has a neurological explanation: olfactory experiences appeal to the limbic brain system that relates to emotions and creativity whereas visual images are prominent on those areas involved on language and abstract thinking [38]. His conclusion is that smell, more than other sensory experiences, can bring to life distant memories and lost emotions associated with it [38].

Lastly one should look at the behavior of the perfume business. The perfume industry has some nuances that makes it unique, namely the holistic need that fragrances satisfy and the supply of luxury with cheaper prices [30]. Originally produced in France and Germany, perfumes became common accessories for the XXth centuries ladies' *toilettes* reaching globalization in the final quarter of the same century [5], [17]. The XXI brought the expansion of perfume consumption into all ages, gender and, most importantly, income. The industry is growing globally, reaching a total volume of USD 31.4 billion in 2018 and expected growth of 3.9% in 2019 [18]. Having increased in almost every continent, as shown in Fig. 1, one can state that fragrance consumption is growing worldwide.
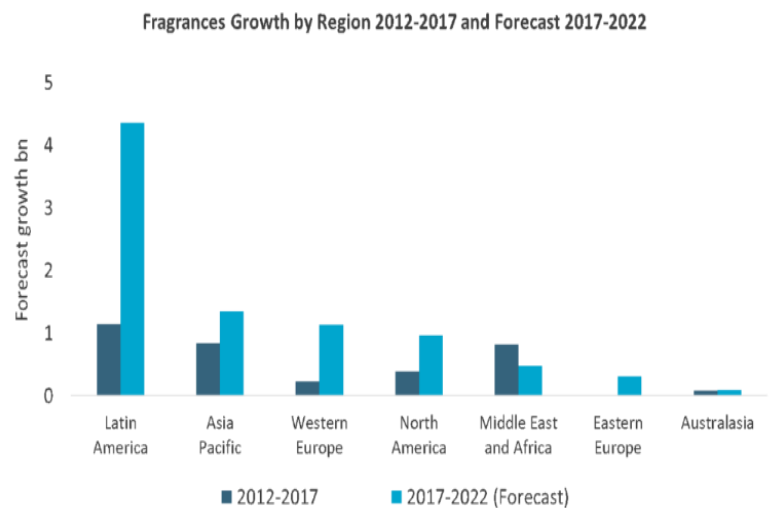
Figure 1.   Fragrance Growth by Region (Euromonitor, 2019)

Scents can't be neither described easily nor properly illustrated by images. This presents a huge challenge for big industry players to promote their products; advertising is now one of the most important expenses of these companies having L'Óreal reached the record USD 9.2 billion spent on 2019 [18].

Special mention should be made to the notion of the Happiness Function, the degree of satisfaction of a consumer for a given perfume [45]. To this regard, the author defines 4 critical factors: scent, endurance, aesthetics and concentration.

One can observe how the technical issues of every perfume can determine its success or failure, but one can also examine that one of the critical aspects every perfume has in order to gain satisfaction is its aesthetical quality. Perfume brands perceive this more quickly than consumers and these brands spend great

efforts on perfume segmentation in order to deliver satisfaction to the most customer segments possible [51].

On J. Candido [7] there's a survey that aimed to study some perfume lovers' patterns. The idea was to find the meaning of the concept "perfume" by asking the importance of all perfume aspects to a specific public, perfume lovers. The results are displayed on Table 1.

One of the conclusions made from this survey is that perfumes are much more than fragrances and one can display perfumes into visual and palpable elements and those elements fit into a perfume art exhibition [7].

TABLE 1.   PERFUME LOVERS SURVEY [7]

Relevance of perfumes' components	Most voted answer	Percentage of votes
How many times do you visit a perfume shop over a year?	Every Months	62%
What is the relevance of "Scent" on your perfume choice balance?	Very Relevant	92%
What is the relevance of "Generator Idea" on your perfume choice balance?	Very Relevant	33%
What is the relevance of "Bottle" on your perfume choice balance?	Very Relevant	33%
What is the relevance of "Package" on your perfume choice balance?	Relevant	36%
What is the relevance of "Advertising" on your perfume choice balance?	Relevant	30%

III.   EXHIBITIONS BENCHMARKS

Displaying fragrances into an exhibition presents a huge challenge for curators. The following pages are the set of all the efforts that have been made to modernize museums and exhibitions and the use of technology to exploit new ways of exposing artistic *media*.

The idea that people visit museums to see exhibitions as selfish pleasure is, somewhat, old-dated; one can walk into a museum alone and enjoy it as a personal experience but, mostly, we tend to visit exhibitions with other people, friends or family, because it is both an intellectual moment and a social encounter [4].

Museum researcher J. Falk [15] states that visitors choose to spend so much time on educational exhibition visits because they can engage what to see, how to learn, when to stay or to leave [15]. Considering these arguments one can determine that interactive exhibitions are "on the rise". Technology is now a main issue to consider for any museum curator; the ability to place the audience as part of the show, using technology, is the subject of many studies and will lead to the transition of classic museums into smart museums [16].

Museum researcher I. Bhattacharya [2] refers to the IoT as any device that can capture information/data and send it into another device, these devices are called "smart objects" since they can perform several and advanced tasks [2]. The implementation of the IoT into museums presents some improvements regarding quality control, data collection and cost reduction. Some examples of modern technology applied would be:

- *Visitors Counter*. It is elementary to know how many visitors come into the exhibition. Laser technology has implemented some cheap devices to be installed on every door to count the number of people that enter and exit the space.

- *Visiting tracker*. In the case of a multi-space exhibition it is important to know how many people visit each room. Modern cameras can use AI to "pursuit" everybody into the different spaces but also smartphones with GPS can do this job.

- *Art Emotion Score*. Installing a camera above the that is scheduled to take a picture to each visitor's face is another source of valuable information that reveals the "Art emotion Score" of each piece.

- *Facial Recognition*. How many Millenials and how many old people view a determined piece? Is there any difference between Men and Women? Facial recognition can be critical to do some segmentation for a determined piece.

- *Biometric Sensors*. Modern cameras can now use AI to measure some interesting body data like temperature, fatigue, heartbeat.

All these collected data allow the museum staff to understand the museum's publics and to draw some *personas*. It also unveils some techniques and campaigns to increase the popularity, income and prestige for an exhibition and, finally, it sets a pattern for further events [16]. In fact, the growth of IoT implementation is gaining momentum, as Fig. 2 shows.
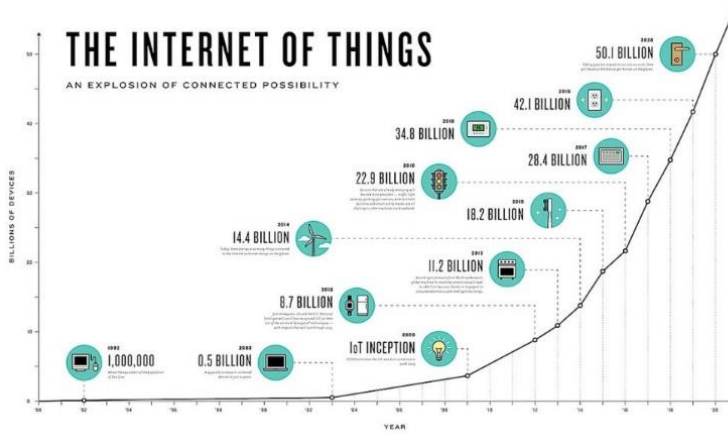
Figure 2. The Internet of Things Implementation (NCTA, 2019)

It is time to evaluate the ancient concept of a "museum visitor" and getting into the idea of a "museum consumer". A person who is a "visitor" to the museum can be seen as a cultural citizen [28] and a "consumer" is a customer that is willing and able to enjoy and consume the museum service [48]. Moreover, one can distinguish a "museum visitor" as an outer experience from two separate realities – the person and the collection – whereas a "museum consumer" is a much more immersive relationship between the individual, the people and the museum [3], since individuals is able to feel things more vividly through their bodies than through their minds [48].

How to make invisible objects into visible realities? The same question was developed into the "Digital Threads across the Landscape" project led by Kitt-Boding-Jensen and his team. The challenge of this project was to turning invisible prehistorical findings into visible landscape through augmented reality and location-based mobile software [23]. Nowadays almost everyone carries a smartphone into any exhibition and the advantages of having such powerful tool must be explored when creating something that seeks to be as unique as updated.

Like the prehistorical findings, perfumes also have a background, a story, behind them and such story is, many times, unknown to the general public.

Since 2009 there has been going an annual exhibition at Milan called *Esxence* and it registered a 10% increase on the number of visitors in 2018 (figures for 2019 are not available). The main thing on this exhibition is to present either new brands or niche perfumes, like a tradeshow for international retailers, which stresses the inner commercial quality perfumes have. However, for a brand to participate, it must fulfill two requirements: to have artistic quality and specific distribution channels.

IV. PROPOSITION OF THE 3-BLOCK EXHIBITION MODEL

In this last section of the paper we should draw the lines for a perfume exhibition. As seen before, Nieuwhol was the first to study how can scents be incorporated into an exhibition though it lacked all the aspects surrounding perfumes: bottle, advertising, story… This approach would be a Perfume Art Exhibition, intended to be inclusive and to embody all visitors into a non-visible reality turned to a very much real experience. The exhibition must have 3 different blocks that should be connected: The Perfume Finder, The Fragrance of the Year and The Factory.

A. Perfume Finder

It is not possible to create a new vocabulary for perfumery as Nieuwhol [15] stated but they can be portraited by images. In this first part of the exhibition, visitors will engage visual representations of the four primary Olfactory Families, according to the Fragrance Wheel [13], [38], displayed on Fig.3.

These representations are followed by some of the key ingredients, for each Family, that can be smelled, tasted and stirred. Additionally each ingredient will be displayed with samples of reference fragrances that the visitors can purchase at the end of the exhibition; for example, Fresh Fragrances will be displayed with some green leaves or citric natural ingredients and samples of fragrances like *Light Blue*, *Acqua di Gio*, *Chrome Pure*, *Hugo*, and much more.

Biometric sensors will be installed on this section, namely the Body Temperature sensor. One can expect ingredients such as woods will increase body temperature as the visitor will experience warmth and comfort whereas Fresh ingredients will decrease body temperature as visitors feel freshness [2].

Figure 3. Fragrance Wheel [13]

B. Fragrance of the Year

The artwork *Images of History* from Miroslaw Balka [4] in 2009 at the "How it is" exhibition from the Turbine Hall is the inspiration for this campaign. The general idea is that visitors had to link on of their memories to historical events of the 20th century and determine a sound pad that connects these two episodes; the outcome of all these connections created the "soundtrack of History" [4]. Visitors are invited to think on an event that took place on the last year. Then they write this event on the board and choose an ingredient that is, somewhat, linked to this event. In the end of the exhibition the set of ingredients, or at least the most popular, will be balanced by a *le nez* into the Fragrance of the Year.

Why not simple vote for the Fragrance of The Year? The reason is that advertising would be playing a much more important role on this poll than the actual scent [15].

C. The Factory

The *Factory* is the place where anyone can watch the production of a fragrance and, even more, monitor the fabrication of a fragrance they choose the ingredients, based on every drop of inspiration from the previous spaces.

The *Factory* will be designed to meet the expectations of the visitors on creating their own fragrance with a standardized limited-edition perfume bottle that evokes this exhibition, as already proposed on my previous paper [7].

The *Factory* will also be the perfect place to study some visitors' behaviors towards several aspects of perfumery: the bottle and the package. It is important to perceive the emotions triggered by some fragrance bottles and packages so the idea of the Art Emotion Score, as described in [2], would be applied to this section. The industry will get almost live feedback on the bottles and packages that are being produced and presented to the general public.

V. DISCUSSION AND CONCLUSIONS

To this step it is important to sum up all the data collected from different sources and draw some discussion on it. The lineup question is how to turn visible an invisible reality such as perfumes; discussing it should start by the definition of perfume. One can define perfume as the end-product of a generator idea, a fragrance, a bottle, a package and advertising. Perfume is not just a fragrance [7].

The discussion started by the very definition of a perfume: the balance between the fragrance, the bottle, the package and advertising. Many authors discuss the importance of each of these components and how they are evolving individually and how perfumery is getting sophisticated; other authors studied the context of perfumery as a cultural/artistic media.

Perfume is not considered to be scent art, as it is designed for sensory enjoyment rather than intellectual or emotional audience engagement and is principally marketed as a commercial commodity [51].

The dual role perfumes play as commodities and art pieces, is the start of this discussion and led to the survey, inquiring perfume consumers the relevance of each perfume component on the decision process, being the "Package" the second most relevant part besides, obviously, the price. One can state that an exhibition of perfumes must include some set of packages in it [7].

To develop a perfume exhibition, one could start by asking the purpose of it. Two important outcomes should be expected:

- Display Perfumes as art pieces.

- Study consumers' segments expectations and needs.

The knowledge, both technical and aesthetical, of perfumes has been the scope of recent exhibitions and shows across the world [25], [27]. These exhibitions had one great advantage to it: they embodied the visitors into some sensorial experiences through scent that, somehow, triggered aesthetical observations. The knowledge is both valid and necessary to develop some vocabulary into perfumery [52].

Technology is playing a critical role on the development of technical issues surrounding modern perfumery and it is also helping many brands to study and deliver some value proposition to different market segments. The use of technology for this exhibition has the great advantage of helping to collect and process data from the visitors' experience; for example, one can study the visitors Happiness Function by positioning several perfumes into different locations and give every visitor a GPS tracking device [2]. This collected data can be easily processed in order to for two critical objectives:

- Improve the visitor's experience.

- Provide valuable data for perfumes brands and, thus, creating value for the industry.

Conclusions: at this point a return to the notion of the dual role of perfumes - commercial and artistic products – is necessary to understand how important this study is and the focus of a fragrance-oriented exhibition to display the art of perfumes and data to the industry develop new value propositions that meet all publics needs and expectations.

It is possible to develop such an exhibition. The 3-Block Exhibition Model is a logical path through some sensorial experiences that, also using some high-end technology, will help to turning visible the invisible and almost mythical aura of perfumes.

Originality and Value: the 3-Block model is an innovative proposition of exhibition because it is focused on the artistic object and it narrows the connection between perfumes and consumers. It also explores new dimensions, immersive and sensorial experiences with new experimental dimensions.

Getting new experiences into perfumery will increase the perceived value of perfumes as they merge from being simple toilette accessories to become something else: a luxury-driven

product that can be an artistic product, meeting some holistic expectations of its publics.

Contributions: some important contributions of this study can be outlined. The first being the display of an exhibition model that is focused on data collection and processing of visitors (blind proof, GPS for olfactory family popularity); information source for sensations perceived on each ingredient and the combination on ingredients.

Insights for the industry for the most popular and the unknown ingredients. Foundation for the development of a virtual factory for the "making of" perfumes.

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