



MASTER THESIS

« TASTE ENCOUNTERS WITH MUMM »: THE EFFECT OF SENSORIAL MARKETING ON
THE WINE INDUSTRY

ADRIANA MAIO

Internship developed at MUMM MARTELL PERRIER JOUET

Paris, France

Professional supervisor
Fabyola Soares

Academic Supervisor
Joan-Miquel Canals Bosch
University Rovira I Virgili

June 1st, 2022

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1 Description of the company	1
1.2 Duties during the internship.....	2
1.2.1 Coordination of Brand Education community	2
1.2.2 Wine & Spirit Education Trust provider	2
1.2.3 Update of the educational materials	3
1.2.4 Taste Encounters with Mumm	3
1.2.5 Final consideration.....	3
1.3 Taste Encounters with Mumm and Thesis Proposal	4
2. METHODOLOGY	5
3. THE DISCUSSION.....	6
3.1 Definition of sensorial marketing.....	6
3.2 Human senses.....	9
3.3 Sensory hierarchy	10
3.4 Blind tasting as a tool to enhance the perception	12
4. SCRIPT AND DESCRIPTION OF <i>TASTE ENCOUNTERS WITH MUMM</i>	13
4.1 Set-up of the experience	15
4.2 Olfactory experience.....	16
4.3 Experience with the glasses	18
4.4 Key messages of the cuvée	20
5. THE IMPORTANCE OF THE WINE GLASSES	22
6. THE NEW FORM OF WINE TOURISM.....	23
7. SENSORIAL EXPERIENCE AND WINE DESTINATION	25
8. RESULTS AND PROPOSAL	26
9. CONCLUSION	28
10. BIBLIOGRAPHICAL REFERENCES	29
11. ANNEXES	31

ABSTRACT

Several studies have reported a significant growth in the sensory marketing as response to the strong competition in the wine industry. Sensory marketing is an efficient tool which focuses on the interaction of the five senses (sight, smell, taste, hearing and touch) to trigger a profitable response from a business' audience. A memorable experience establishes a stronger connection with the product by increasing satisfaction and influencing the consumer's behavior and attitude. The positive effect of the sensorial marketing has inspired Mumm Champagne House to design a disruptive experience to rediscover their signature grape: Pinot Noir from Montagne de Reims. This gave birth to two glasses, complementary and antagonist at the same time, which properties enhance the perception of the Champagne. The experience is completed by five artificial aromas which can also be found in the wine (violet, rose, citrus, honey and butter). Some of the aromas, due to genetic factors, won't be perceived by the customers as only 50% of the population is sensitive to them. The goal is to break the rules of the classic experience, increasing the social and interactive component of the wine tasting. In addition, engaging the five senses will help to create and intensify brand personality, brand perception and the perceived value of the product or service offered. Finally, it has been noted the multidimensional approach will also contribute to retain the information in the long-term memory. Taste Encounters with Mumm aims not only to showcase Mumm's wine identity and (re)discover the House's cuvées but also to foster the House's wine credentials and oenological credibility. This work also aims to expand this experience by reaching a larger audience. This will enable the consumers to discover the complexity of Mumm's champagne at home supported by engaging digital contents and through exclusive off trade and e-commerce distribution.

KEY WORDS: Sensorial Marketing, Neuroscience, Wine perception, Long-term memory, consumer behaviour

LIST OF ABBREVIATIONS:

AOC Appellation Origin Contrôlée

BA Brand Ambassador

HNWI High Net Worth Individual

RSRV Reserved

WSE Wine Sensory Experience

1. INTRODUCTION

1.1 Description of the company

The official founding of the Maison Mumm dates back to 1827 even if the entrepreneurial spirit of the family is recognized much earlier. In Germany, specifically in Cologne in 1761, the family decided to start a business of wine producers and traders which takes the name of "P.A. Mumm", which is the name of the owner Peter Arnold Mumm (Champagne Mumm, n.d.). At the beginning of the 19th century, Gottlieb, Jacobus and Philipp, the three sons of Peter Arnold Mumm, became aware of the quality of the champagnes produced in France and decided to build a winery in Reims, the future headquarters of MUMM. From the very beginning, the goal was to make the most of their lands and hence the motto written by Georges Hermann Mumm: "Only the best" (Champagne Mumm, n.d.). The company expands his lands quickly, reaching the 218 hectares. Pinot Noir is defined as the signature grape of the House and represents the 78% of the surface planted in particular in the Montagne de Reims. The Mumm vineyards comprise 160 hectares of Grand Crus classification and are located in some of the most admired areas of the region, including 8 villages which are the best expressions of the Champagne terroir: Aÿ, Bouzy, Ambonnay, Verzy, Verzenay, Mailly, Avize and Cramant. The House has demonstrated its capacity for innovation and its strong commitment to the terroir by installing the presses directly in the vineyards, an innovation that represents its commitment to quality that continues today.

To ensure the highest quality, Mumm decided to purchase the grapes instead of must. With this innovation, the Champagne house was able to control every step of the vinification. In 1876 Georges Hermann Mumm played a decisive role in shaping the future of his champagne house. As a tribute to his prestigious clients, he had the neck of each bottle of his Cuvée Brut decorated with a red silk ribbon (Champagne Mumm, n.d.). This decoration was inspired by the red bands bestowed on those illustrious characters who received the highest French honors, the Ordre Royal et Militaire de Saint Louis and the Grand Cordon de la Légion d'Honneur. (Champagne Mumm, n.d.). Beyond the visual strength of the Cordon Rouge, this decision has firmly established MUMM as an ambassador of the spirit of Champagne, in recognition of his achievements. More recently, the house has changed hands several times, first in the Seagram group, then acquired by Allied Domecq and finally (2005) passing to Pernod Ricard, leader in the production and distribution of 350 brands, including wines and spirits.

1.2 Duties during the internship

The main objective of the internship, as a Champagne Brand Education assistant, was to support the team by participating on the Strategic Plan Brand to ensure a high level of visibility. As a member of the Advocacy Team & Brand Homes I have worked closely with various internal departments (Markets, AOC, Studio and Head Quarters), external partners (Wine gurus, medias experts, wine influencers and agencies) as well as drive markets to ensure consistency & creativity. In details, I have implemented the communication with local champagne activations and monitor champagne speech and competitors' actions. Additionally, I have participated in the creation and development of wine advocacy and education assets. Finally, I have coordinated and engaged the Champagne Brand Ambassadors Community.

1.2.1 Coordination of Brand Education community

Brand ambassadors are a crucial asset for the business as they reflect the identity of the brand. They play a decisive role in the perception of the brand, and they are also the link between the brand and the final consumer. Within Mumm, 15 Brand Ambassadors are recruited every year to cover a specific geography around the globe which reflect the main market of the Champagne House: US, France, Honk Kong, Korea, Australia, Malaysia, Japan. To keep up with the BA community, each of them is asked to send over a monthly report to describe the main goals which includes partnerships, events, market activations and trainings. The student was in charge to design the template of the report which they had to follow. In addition, the student is responsible for the organization of the bi-monthly webinar with the objective to educate the community on different topics of their interest such as regenerative viticulture, ageing of Champagne and fine wine as an investment. Last but not least, each year all the BA are invited to Champagne for a week to discover Mumm and get to know each other's. This represents a very big event and requires great organizational skills to coordinate internal and external stakeholder.

1.2.2 Wine & Spirit Education Trust provider

One of the latest projects I have collaborated on is the WSET (Wine & Spirit Education Trust). The Wine & Spirit Education Trust is an awarding body and registered charity devoted to the development and delivery of qualifications and courses in wines and spirits. The competition in the wine industry is growing fast and Mumm believes that it's crucial to push this type of program. In addition, it has been shown that in-depth knowledge of the product has also a positive effect on the credibility of the brand. As part of the education program the goal is to train internally the Brand Ambassadors and the sales team to achieve

at least Level 2 in WSET. In this context, my task was to lead the communication with the WSET to select and validate the list of wines which will be served during the tasting sessions.

1.2.3 Update of the educational materials

The educational material offers a big support to the internal team, Brand Ambassadors and sales team. Here my duty was to verify if the content was updated and integrate it with new information if needed. This also has implied to find a new supplier for our MOOC (massive open online course) to deliver learning content as the previous one was not longer able to meet the needs. On the online platform you can find the info that you might need: history of the House, the making process of Champagne, the range of wines, tasting notes. The material provided by the house is very complete and it include videos, infographics, written presentation. Finally on the online platform there is also the possibility to test your knowledge by answering some question at the end of each chapter and you can even challenge your colleagues. To keep up with the trends all the content is revised every 6 months to assure the best experience to the users.

1.2.4 Taste Encounters with Mumm

Taste Encounters with Mumm is a multisensory experience developed in 2021 with the aim of breaking the rules and offering a new way of perceiving the Pinot noir, Mumm's signature grape. Laurent Fresnet, Mumm cellar Master, wanted to offer a new, surprising, innovative way of tasting the cuvée. Therefore, he designed a multi-sensory experience that challenges our perceptions and reveals the complexity of Mumm champagnes. He surrounded himself by two experts in the field: Gabriel Lepousez, neuroscientist and specialist in “neuro-oenology”, and Octave de Gaulle, a designer and friend of the House. Thanks to their expertise, they have given birth to this sensorial experience. I have been working on this experience for the majority of the time during my internship and I got to see every aspect of it from the glass production till the final event. This allow me to have a comprehensive understanding of how the five senses are integrated and at the same time can be amplified during the wine tasting.

1.2.5 Final consideration

This internship has given me the chance to boost my knowledge on the Champagne wine, collaborating with different entities and supporting the Advocacy, Education and Brand Homes team but also developing and coordinating the various projects along the six months.

1.3 Taste Encounters with Mumm and Thesis Proposal

Maison Mumm's story, which stretches back nearly 200 years, features an ethos of continual innovation in the making of champagne. This avant-garde vision is rooted in an uncompromising relationship with quality, summarized by founder Georges Hermann Mumm's motto: "Only the Best". Maison Mumm's resolutely forward-looking spirit continues to explore new methods with which to reveal the essence of Pinot Noir, whose powerful, rich and elegant fruit endow the House's cuvées with structure, complexity and a vibrant freshness. Cellar Master Laurent Fresnet, the official custodian of Maison Mumm's 200-year legacy of savoir-faire, takes advantage of this inherited wealth of expertise to fully develop the flavors of Pinot Noir. He has set a new challenge: to enrich the experience of tasting Mumm wines by revealing the full spectrum of their aromas. He has conceived this new approach by bringing together Gabriel Lepousez, a neuroscientist who has devoted 15 years to the study of how wine is tasted and perceived, and the designer Octave de Gaulle, who resolved the technical feat of Mumm's Grand Cordon Stellar bottle—the first champagne that can be savored in space. This richly creative encounter between three leading experts in their respective fields became the starting point of an extraordinary experiment. Fresnet began by describing each cuvée to Lepousez: its primary characteristics and its subtler, sometimes overlooked nuances. The cellar master's ambition was to allow for a finer, more discerning reading of each wine and its more delicate aromas. Lepousez drew on his own research, applying neuroscience to the appreciation of wine. During a tasting, the brain receives a multitude of signals triggered by the senses, the most important of which are sight and touch. These signals have an impact on our sense of taste and as a consequence, our appreciation of a wine. When one or more traditional sensory cues are altered, our automatic habits are challenged, leading to a more spontaneous tasting experience. More aromas and flavors to come to the fore, opening up new perspectives that go beyond the wine's intrinsic qualities. Octave de Gaulle, expert in precise engineering has created two tasting glass to enable the experience. In this context the main objects of the experience are the following:

- Showcase Mumm's wine identity and (re)discover the House's cuvées
- Embody the avant-garde vision of the House through an innovative and unique approach
- Foster the House's wine credentials and oenological credibility
- Offer educational and engaging "ready-to-use" experience to be activated in market at various levels (trade, sommelier, consumer)

The goal of the Master Thesis is first to define sensorial marketing and analyze the five senses (sight, nose, smell, taste and touch) to understand how they interact with the wine. Sensory marketing reaches the consumer on the emotional level, playing with the five senses with the objective to create memorable wine experience due to the sensorial approach (The Wine Tasting "experience": Sensory marketing in the wine industry, 2022). Companies that are looking for innovative ways to reach out to customers use all the senses. This strategy of manipulating clients' emotions is used primarily by large businesses. Consumers that use more senses to evaluate a company's product offer are more likely to remember information about that product or location. (Koszembar-Wiklik, 2022). Sensorial marketing will be then applied to the experience *Taste Encounters with Mumm*, showing the sensorial effect and the importance also of the glass on the wine perception. Indeed, the weight, the color, the shape, the texture of the glass might change the final perception and appreciation of the wine. Finally, I will underline the power of the senses and their role in wine tourism. Taking Taste Encounters with Mumm as one of the best examples of sensorial Marketing, this thesis work centers on the amplified effect of the senses on the wine perception. Specifically, this master's thesis details and justifies the importance of the sensorial marketing in the future, as one of the main assets to retain customers. As noted by Krishna, 2012, sensorial communication increases the chances for information transfer from short-term memory into long-term memory.

2. METHODOLOGY

The methodology of this project is qualitative research. The student gathered information about sensorial marketing and his role in the wine tasting. The research consisted of studying the details that should be observed in Taste Encounters with Mumm to understand the interaction of the five senses and the effect on the long-term memory. The student compiled information from several sources to determine how the environment influence the wine perception. Apart from this, the student did Taste Encounters guided by Laurent Fresnet, Mumm cellar Master. This helped the student to understand the principles of the experience. In a second moment, the student reached out to the neuroscientist, Gabriel Lepousez, to discover the interaction of the aromas with the brain. Finally, the student had the chance to meet the designer, Octave de Gaulle to discuss the art of glassmaker. While working at Mumm, the student built a survey to collect feedback about the experience, to understand how the customer would perceive Taste Encounters with Mumm and the general appreciation level.

3. THE DISCUSSION

The research will be divided into three sections. In the first, the concept of sensorial marketing will be defined and the role of 5 senses (sight, smell, touch, hearing and taste) in the perception of the wine. To fully understand the topic, examples from the wine industry will be presented before introducing the experience I will be focus on: *Taste Encounters with Mumm*. The second part is entirely dedicated to *Taste with Mumm*, groundbreaking sensorial champagne experience, orchestrated by Mumm Cellar Master, Laurent Fresnet. Here, it will be shown the concept, the goal and benchmark of the experience, underlying the Pinot Noir, as the signature grape of the House. Then, *Taste Encounters* will be described step by step focusing on the elements of which the experience is composed: the glasses, the aromas, the tasting mat. The research will follow a neuroscientist approach, analyzing the interaction of the wine with the environment and the response of the brain to the stimuli collected during the tasting. The last chapter will present the result of this experience and the role of the five senses in retaining the information longer, operation on the long-term memory. Finally, the goal is to show that by engaging the five senses the wine industry can intensify the brand personality, brand perception and the perceived value of the product or service offered.

3.1 Definition of sensorial marketing

Sensory marketing is defined as marketing that involves the customer's senses, influences the perception of a certain product and guides his behavior, through a sensorial experience. It is common knowledge that the five senses (sight, smell, taste, hearing and touch) might impact the buying decision and affect the image of a brand. Our brain analyses sensory inputs, such as sensory stimuli from a brand, and converts them into sensory perceptions that form the basis for an individual decision on how to act in a certain situation. Evidence from research states that individual emotions and feelings for a brand, based on positive or negative valence, are classified in essentially the same way in different cultures. This means that, for instance, enthusiasm and relaxation have the same meaning across cultural boundaries. It is also claimed that these emotions and feelings impact on attitudes and evaluations of a brand, regardless of culture. In a global consumption culture, evoking emotions and feelings is of major importance. As shown in Figure1 sensory branding concerns how a brand uses the five senses to create brand identity and position the brand at an individual level, resulting in brand image. A sensory branding model incorporates societal culture (S), service environment (E) and brand (B) as important factors.

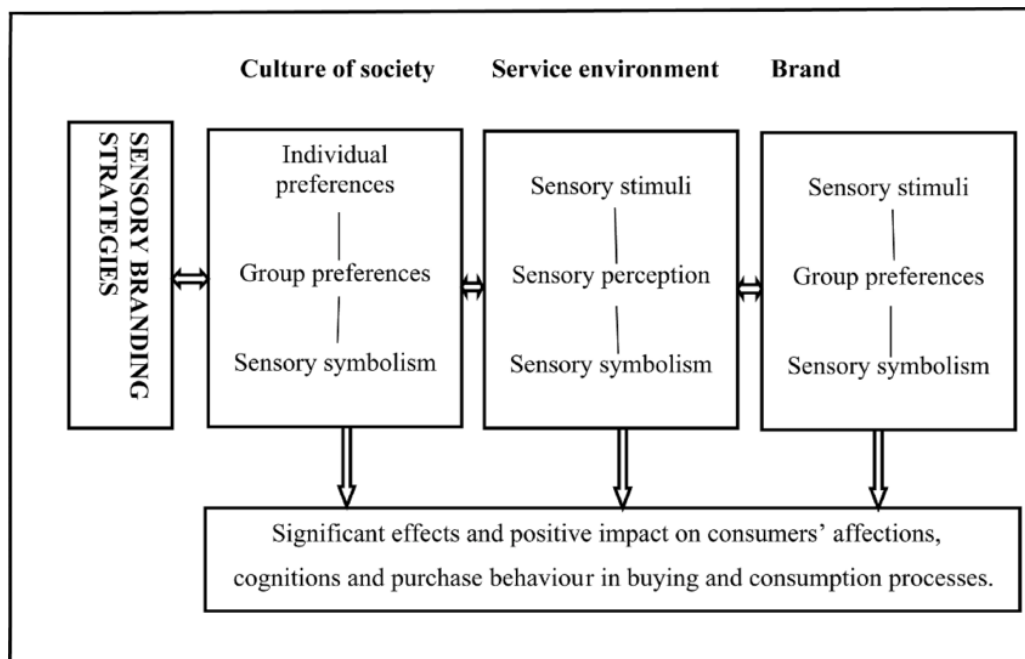


Fig 1. Sensory Branding Model

Source: Hulten, Bertil. (2017). Branding by the five senses: A sensory branding framework. *Journal of Brand Strategy*. 6. 1-12.

Sensory marketing is now recognized as an important tool for strengthening the bond between brand and consumer by stimulating all senses and eliciting emotions. Sensory marketing can influence consumer behavior at each stage of the purchasing process: activation of desire, awareness of the product or service, evaluation of the product or service, purchase, and post-purchase evaluation. This type of 360° sensory marketing helps to define the points of contact between the consumer and the brand at each behavioral stage: before, during, and after the purchase. Each of the five senses are involved in transmitting the perceptions and generating emotions, according to the nature of the product or service. Ideally, the level of appreciation of the experience is proportionated to the number of stimuli received. Research has shown that the involvement of multiple senses can have an amplified and synergetic effect on the final perception. In other words, each sensory stimulus reinforces the messages conveyed by all the others, giving rise to stronger, more consistent, and more holistic perceptions. Multisensory perceptions therefore facilitate faster product recognition and attribution in response to stimuli, as well as higher processing speeds and consequently a better assessment of the message as we can observe in Figure 2.

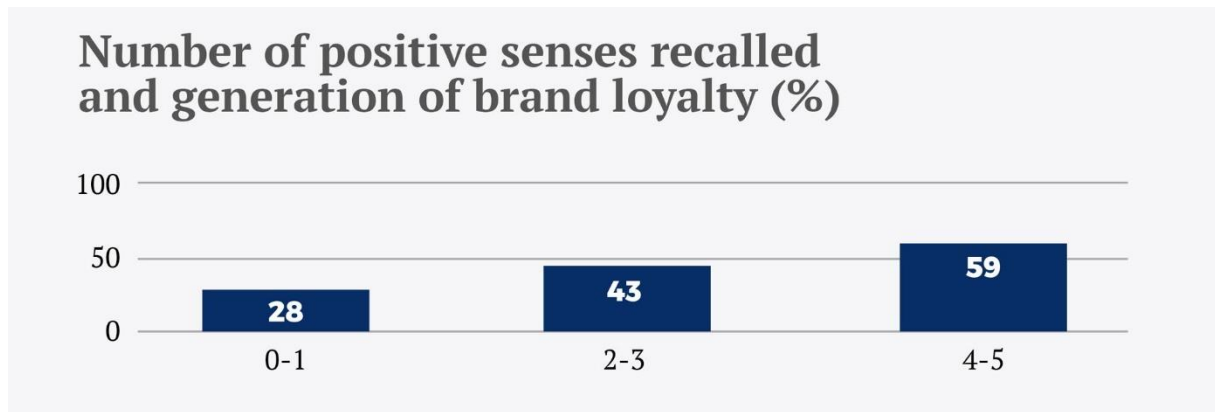


Fig 2 Number of positive senses recalled and generation of brand loyalty (%)

Source: hollis, n. (2007). *smelly business*. esomar fragrance 2007. millward brown.

The main strategic objective of sensory marketing is to communicate a brand image. The goal is to use the senses to reinforce the product's attributes, functional or emotional benefits, values, and personality, conveying its relevance to the consumer and helping to communicate its brand identity (Fig. 3).

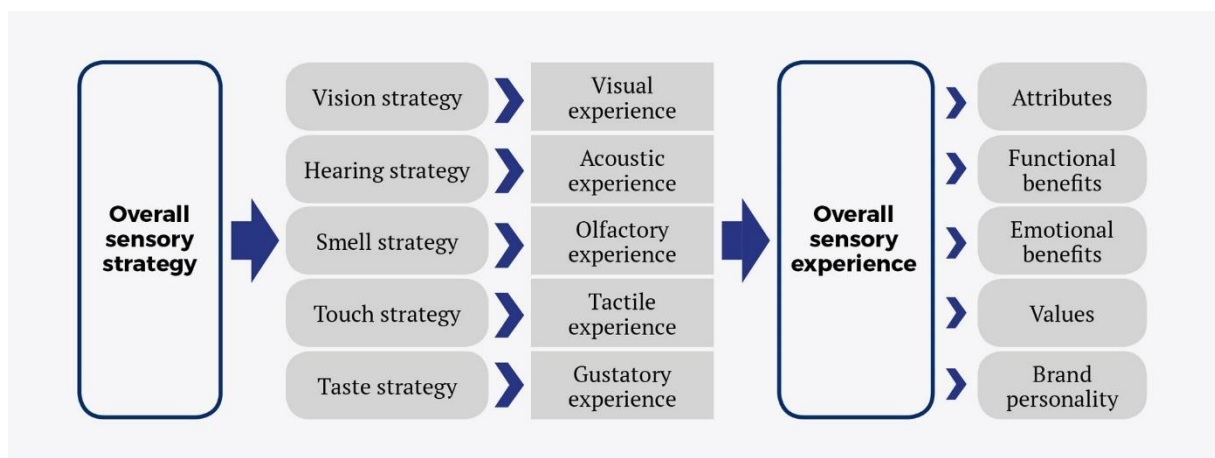


Fig. 3 Sensory Marketing: Straight to the Emotions

Source: hollis, n. (2007). *smelly business*. esomar fragrance 2007. millward brown.

3.2 Human senses

Drinking wine is one of the most complex multisensory experiences, where all the senses tend to be activated. When we taste wine, both as a professional and as an amateur, the brain collects multiple stimuli, which translate into perception. The ultimate goal is to elicit a response, which based on a combination of external and internal factors is described as positive or negative. Finally, based on the degree of interaction, it will finally be able to act on the long-term memory of consumers, increasing the chances of being remembered in the future. Therefore, for a more precise understanding of how a consumer experiences wine, it is essential to consider how the senses interact before, during and even after the tasting experience itself (for example, with the latter which could influence the intention purchase and / or willingness to pay for a product). It is essential to consider the importance of multisensory perception during what could be considered the consumer's journey during the wine experience. A sense is defined as a biological system used by an organism for sensation, the process of gathering information about the world and responding to stimuli. The brain receives signals from the senses, which continuously receive information from the environment, interprets these signals and causes the body to respond, chemically or physically. The five senses (sight, smell, taste, touch and hearing) play different roles, but they all contribute to providing a multisensory vision. The sense of smell is activated by the aromas that are perceived by the nose through the nasal cavity (the so-called "orthonasal odor") and in our mouth, through the dorsal pathway that connects the throat and the nose ("post-nasal odor"). The sense of taste detects the presence of sour, bitter, sweet, salty and umami and plays a fundamental role in wine tasting. The sense of touch analyzes the consistency of the wine as well as the temperature or the presence of spicy or irritating compounds. Last but not least, it is also important to consider the sense of hearing, which is stimulated by the sound of a wine being poured into a glass (the sound of Champagne bubbles, the sound of the cork being pulled out of the bottle, or also the speech of the sommelier. During sensation, the sense organs collect various stimuli for transduction, that is, transformation into a form that can be read and understood by the brain. Sensation and perception are fundamental to almost every aspect of cognition. of an organism's behavior and thinking In organisms, a sensory organ is made up of a group of interconnected sensory cells that respond to a specific type of physical stimulus. to and from the brain and body), the different types of sensory receptor cells (such as chemoreceptors and thermoreceptors) transduce sensory information from these organs to the central nervous system, eventually arriving at the sensory cortices in the brain, where sensory signals are processed and interpreted. Sensory systems, or senses, are often divided into external (exteroception) and internal (interoception) sensory systems. Human external senses are based on the sensory organs of the eyes, ears, skin, nose and mouth. The

information received from one sense has the potential to influence the final perception. Sensation and perception are studied from a variety of related fields, most notably psychophysics, neurobiology, cognitive psychology, and cognitive science.

3.3 Sensory hierarchy

The idea of sensory hierarchy can simply be explained by the influence of sight on our perception of wine. As humans, our decisions are made based on the visual information we receive. When visual information (e.g. wine colour) conflicts with olfactory information (e.g. aromatic profile), vision will always be in first place. A case in point is how the simple addition of an odorless and tasteless red dye to a white wine will strongly influence the taster's analysis to the point of using red fruit descriptors (blueberry, raspberry) to characterize this red colored wine, even though this same white wine is normally described with descriptors such as white fruits and honey (Morrot et al., 2001 *Brain Lang*). This effect also manifests itself in our daily tasting comments: the use of red fruit descriptors is to some extent limited to red wine. The influence of color extends to the intensity of the color: the darker the color of the wine, the more aromatically intense it will be perceived (Kemp & Gilbert, 1997). Therefore, when we taste a wine, the visual information can completely alter our aromatic analysis of it. Vision is a pre-eminent sense and carries a lot of weight on all of our actions and decisions. In the brain, the area involved and engaged during the recognition of a visual stimulus represents approximately 16% of the surface of the cortex versus only 1% when an olfactory or gustatory stimulus is present (see Figure 4, adapted from Yarkoni et al., 2011 *Nature Methods*; Reilly et al., 2020 *Journal of Neurolinguistics*). The sense of sight will prevail and will monopolize the information that will be used by our brain to make decisions and to make judgments. Therefore, studies involving brain imaging have shown that activity in the gustatory and olfactory centers increases when the eyes are closed and decreases when visual information returns to plain sight (Wiesmann et al., 2006 *NeuroImage*; Xu et al., 2014 *Neuroimage*).

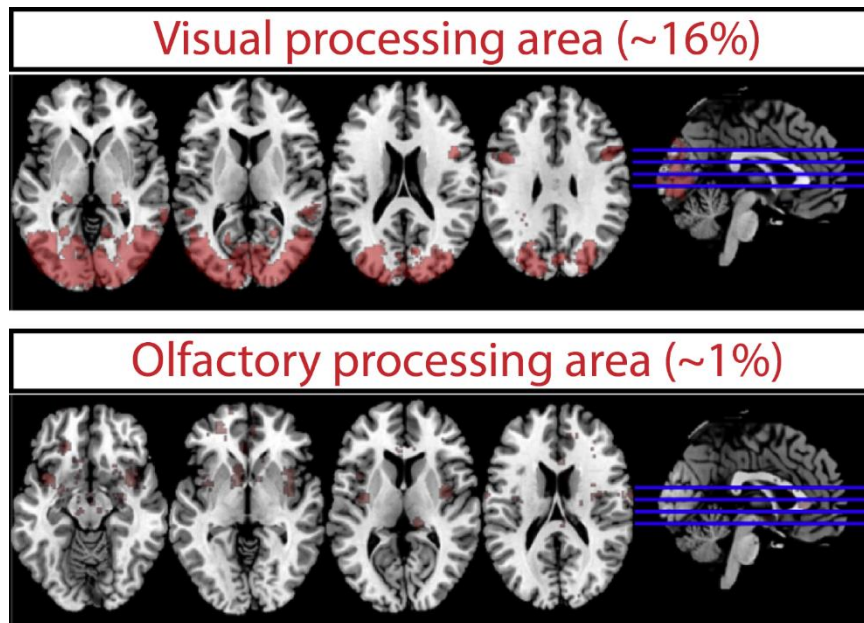


Figure 4: Brain imaging data (fMRI) showing the average functional brain activation maps (activated area are colour-coded in red) in response to a visual stimulation (top) or to an olfactory stimulation (bottom). Adapted from Neurosynth (Yarkoni et al., 2011 *Nature Methods*) and Reilly et al., 2020 *Journal of Neurolinguistics*.

Another aspect that can explain the preponderant significance of visual information in our representation of the taste of wine is sensorial temporality. In fact, we often tend to look at the wine before physically putting it in the mouth, to taste it first, so to speak, with the eyes. However, the brain is a predictive and statistical machine that uses information from past and present experiences to predict and anticipate the future. ("On the" predatory "influence of our eyes on the taste of wine", n.d.). This anticipation phenomenon is even more effective if the first information about wine that reaches our brain is pre-eminent visual information. As a result, our brains are "imbued" and conditioned by visual details such as color. The brain tries to predict and anticipate the taste of wine based on this valuable information, recalling its memory of red wine. Additionally, color can create a reduction in attention to selectively enhance the focus of aromas associated with red wine, while inhibiting the analysis of aromas associated with white wine. Thus, the brain's reconstruction of a coherent picture of wine is significantly built on the first structure established by preliminary visual cues. In addition to color, other visual information such as the price of a wine can determine our judgment. In a blind tasting where the only information provided on the wines is the price, this modification deepens the quality judgment expressed by the wine in question. In traditional tasting, the protocol generally invites the taster to first look at the wine, then to analyze the nose and then to confirm the impressions in the mouth. In the execution of this eye-nose-mouth temporal sequence, all the

numerous and dynamics of the mouth - taste, tactile, trigeminal, retronasal - are then influenced by previous events or at least relegated to the last row for only a "confirmation" of the first image. This natural tendency to confirm previous elements is all the more important that such "bias" is a cognitive bias, a form of hard-wired, subconscious thinking mechanism that automatically leads the brain to reinforce more information that confirms pre-existing beliefs. ("On the" predatory "influence of our eyes on the taste of wine", n.d.). Given the unique richness of the sensations that emerge in the mouth, this phase deserves more than being just a last step to confirm the aromas identified on the nose in the mouth. One approach would be to simply reverse the classic nose-mouth sequence and start with the mouth. In a mouth-nose-eye sequence, the brain first obtained a native holistic picture of the harmony between taste and texture on the palate, followed quickly by the retro-nasal odor, without any preliminary influence. Interestingly, one method was practiced by gourmets in the 15th-16th centuries, who were tasked with ensuring the origin of the professional wines they sold. For this taste certification, they practiced their geosensory tasting version with a shallow matte silver cup in dark cellars using only candlelight ("On the" predatory "influence of our eyes on the taste of wine", n.d.). In the absence of transparent tulip-shaped glasses, the use of an opaque glass guides the tasting to first take a sip and focus on the gustatory sensations and on the postnasal odor and finally on the color and therefore clarity of the wine that could only be a candidate when you approach by candlelight. Nowadays, cup tasting is still the standard reference for tea or sake tasting. These illustrate how the design of the tasting vessel can deeply shape the method of experimentation and change the center of our attention.

3.4 Blind tasting as a tool to enhance the perception

Blind tasting is a great alternative to reduce the influence of visual information and can be done by simply closing your eyes or using dark glasses. Consequently, the other four senses will be amplified. It is common practice for wine professionals to close their eyes during tasting and may also explain why blind people perform better in olfactory identification (Rombaix et al., 2010 NeuroReport). Interestingly, such a simple and playful experience can turn into an uncomfortable situation for some tasters, as some people become slightly anxious to taste an item that they cannot identify with their eyes at first. Although feeling uncomfortable during a wine tasting is not a desirable option, such an experience can be decisive not only for understanding the weight of sight in the taste of wine, but also for revealing to what extent closing our eyes can increase our sense. of taste and smell. When tasting with an opaque black glass, not being able to see the color of the wine will give you the freedom to mentally explore certain facets of the wine that would otherwise have been obscured by prior knowledge of color.

4. SCRIPT AND DESCRIPTION OF *TASTE ENCOUNTERS WITH MUMM*

Maison Mumm's story, which stretches back nearly 200 years, features an ethos of continual innovation in the making of champagne. This avant-garde vision is rooted in an uncompromising relationship with quality, summarized by founder Georges Hermann Mumm's motto: "Only the Best". Maison Mumm's resolutely forward-looking spirit continues to explore new methods with which to reveal the essence of Pinot Noir, whose powerful, rich and elegant fruit endow the House's cuvées with structure, complexity and a vibrant freshness. The cellar Master Laurent Fresnet, the official custodian of Maison Mumm's 200-year legacy of savoir-faire, takes advantage of this inherited wealth of expertise to fully develop the flavors of Pinot Noir. When he joined Maison Mumm in January 2020, Laurent Fresnet has set a new challenge: to enrich the experience of tasting Mumm wines by revealing the full spectrum of their aromas. He has conceived this new approach by bringing together Gabriel Lepousez, a neuroscientist who has devoted 15 years to the study of how wine is tasted and perceived, and the designer Octave de Gaulle, who resolved the technical feat of Mumm's Grand Cordon Stellar bottle— the first champagne that can be savored in space. Fresnet began by describing each cuvée to Lepousez: its primary characteristics and its subtler, sometimes overlooked nuances. The cellar master's ambition was to allow for a finer, more discerning reading of each wine and its more delicate aromas. Lepousez drew on his own research, applying neuroscience to the appreciation of wine. In the course of a tasting, the brain receives a multitude of signals triggered by the senses, the most important of which are sight and touch. These signals have an impact on our sense of taste and as a consequence, our appreciation of a wine. When one or more traditional sensory cues are altered, our automatic habits are challenged, leading to a more spontaneous tasting experience. More aromas and flavors to come to the fore, opening up new perspectives that go beyond the wine's intrinsic qualities. Laurent Fresnet commissioned Octave de Gaulle to conceive and interpret sight and touch-based cues that would put a spotlight on the different latent qualities identified by Fresnet in each cuvée. Two glasses were formulated. One glass features a smooth, glossy bowl tinted a deep saturated purple, with a thick, weighted stem on a smooth, wide, polished stainless-steel base, making it significantly heavier in the hand than a traditional champagne glass. The second glass is frosted on the outside, giving it an icy appearance and grainy sensation on the lips. The fine stem has sharp edges, while the aluminum base, somewhat narrower than on a classic Mumm champagne glass, has a slightly roughened surface. The overall weight is much lighter than a standard champagne glass.

A native of Champagne, Laurent Fresnet has a profound personal attachment to the Montagne de Reims, having grown up the Grand Cru village of Sillery, in a wine growing family that has been making 100% Grand Cru champagnes for five generations. Fresnet, who joined Maison Mumm as its new Cellar Master in January 2020, was particularly drawn to the wealth of its terroir. “Mumm boasts some of the most exceptional vineyards in Champagne,” he declares. “This terroir has everything one could wish for in creating the most exquisite cuvees.” His commitment to innovation took hold during his studies, first at a renowned research centre in Avize, and then later at the University of Reims, where he majored in oenology, biology and biochemistry. Laurent Fresnet’s vision of champagne is of a wine that is both alive and constantly evolving. With his insatiable energy and curiosity, he looks towards the future with the same avant-garde spirit that has inspired Maison Mumm since its very beginnings. Laurent Fresnet invited Gabriel Lepousez, before the tastings began, to take guests through a simple olfactory experiment with the emblematic Mumm Grand Cordon cuvée, which revealed dramatic variations in our individual responses to smell. Research published in 2019 has revealed that these differences are genetic. In addition to our genes, Lepousez explained, we are also powerfully influenced by memory, emotional associations, and many other exterior factors that give us highly individualized and personal responses. Laurent Fresnet chose three cuvées that are particularly representative of the House. Tasted in the regular glass, Mumm Grand Cordon Rosé has great freshness in the attack, after which it reveals its fruity nature. When tasted in the heavier, polished purple glass, however, it reveals an attractive depth and gourmet notes of red fruit (morello and amarena cherries) and Viennese pastry. The experiment was repeated with the Mumm Brut Millésimé 2013. Laurent Fresnet suggested tasting it first of all in the much lighter, frosted glass with its texture surface, which reveals a hidden freshness with delicate, lucid aromas that do not normally come to the fore with this cuvée. Tasted in the classic Mumm glass however, this mature, structured and precise vintage cuvée offers gourmet pastry notes. With the RSRV Blanc de Noirs 2013, a standard glass released all the wonderful qualities of a mature Pinot Noir from Verzenay: generosity, complexity and aromas of ripe fruit. However, when tasted in the frosted glass, this wine revealed great freshness with aromas of citrus and candied peach. Laurent Fresnet points out that this striking freshness allows one to foresee the great ageing potential of this exceptional wine. “This innovative experiment helps reveal the wealth of nuances that are hidden in Mumm’s wines, as well as the remarkable, kaleidoscopic nature of our own, marvelously human responses to champagne,” concludes Laurent Fresnet.

The Taste Encounters with Mumm experience must be led by a Brand Ambassador, or a presenter trained by the Brand. The full experience, including the olfactory experience and

the experience with the glasses and the four cuvées takes 90 minutes. It's possible to have the experience without the olfactory experience and a smaller number of cuvées. However, it is recommended to use a minimum of 2 wines and 2 different glasses. For sanitary reasons, it is strongly recommended that the Ambassadors and the presenters/contributors wear white gloves while handling the objects. As show in the figure 5 the *Taste Encounters with Mumm's* kit is composed by the 3 glasses, the tasting mat, the coasters and the aroma sticks. The aroma sticks are used for the 5 aromas which are sprayed directly on the stick.



Figure 5. *Taste Encounters with Mumm* kit

Kits composed by the 3 glasses, the tasting mat, the coaster and the aroma sticks

4.1 Set-up of the experience

Before the participants arrive, the Brand Ambassadors will prepare the objects for the experience as follows:

For each participant:

- 1 frosted glass
- 1 coloured glass

- 30cl Mumm glass (Absolus 30 Lehmann model) – number of glasses is proportional to the number of cuvées tasted
- 1 water glass + bottle of water
- 1 individual spittoon
- Pen and notebook (optional)

For the Presenter/Brand Ambassador, it's important also add the scent sticks and the 5 vials of aromas.

The wines to be tasted must be at the right temperature (8-10°C) and tested before they are served. In case one of the wines is corked, always set aside an extra bottle.

4.2 Olfactory experience

Duration: 30 minutes

Just before the olfactory experience begins or during the introduction, the Brand Ambassador/presenter prepares the scent sticks for the participants with Aroma A (violet). The sticks are then given to each participant individually. Each scent stick must be marked with A, B, C, D and E (by hand) so that the participant can identify the aromas.

Aroma A

Brand Ambassador/Presenter:

- Ask the participants if they can smell Aroma A, to what intensity, and if yes, to identify this first aroma. Let the participants express themselves and interact freely
- Without influencing the participants, the Brand Ambassador/Presenter can share their impressions and feelings.
- After a few minutes, the Brand Ambassador/Presenter describes the aroma:

The Aroma A corresponds to a smell that can be associated with violet (flowers). Around 50% of the world's population cannot smell or can barely smell this aroma, quite simply because of each person's genetic capital.

Wine is often conceived as a product reserved for a few connoisseurs who are able to carry out an in-depth analysis of the aromas, while this sensorial experience has completely the opposite objective.

In fact, the idea is to break the rules by offering a molecule that not everyone is able to recognize: B-ionone. Several studies have confirmed how this molecule is perceived only by a part of the population. For example, Laurent Fresnet is absolutely not sensitive to

violet, even though he plays the role of cellar master. After this statement, the public generally feels more comfortable and the approach to the wine tasting is now different.

The second objective of this sensory experience is to invite the participants to share their impressions, to discuss and finally to dialogue. Mumm also wanted to take a step forward by focusing on the importance of subjectivity. During the tasting, there is not a single right answer, everyone receives different stimuli and perceptions. The description of the wine is determined by multiple factors such as genetics, experience, culture.

AROMA B

After smelling the aroma A, the Brand Ambassador/Presenter or an assistant prepares the scent sticks for the participants with Aroma B. The procedure is repeated the same as before. The Aroma B corresponds to a smell that can be associated with Damask rose (flowers) and is proved by the molecule β -damascenone. The guest will might use the following descriptors: fruity, sweet, ripe fruit, quince, grape. As with violets, some of the population cannot smell or can barely smell this aroma, due to their genetic makeup.

AROMA C

The experience follows with the Aroma C which corresponds to a smell that can be associated with washing powder or soap, which evokes a sensation of freshness, citrus fruit or bergamot. As with violets and Damask roses, some of the population cannot smell or can barely smell this aroma, due to their genetic makeup. After this first part the following conclusions are reported:

- The degree of intensity changes from one person to the other
- The genetic capital is one of the factors that influences our perception of aromas and smells, and therefore wine.
- Each person with their own genetic capital therefore has a unique experience of certain aromas.

AROMA D:

The Brand Ambassador/Presenter or an assistant prepares the scent sticks for the participants with Aroma D. The sticks are then given to each participant individually. Firstly, the Brand Ambassador asks the participants to smell then taste the Mumm Grand Cordon cuvée with the standard glass. Secondly, the Brand Ambassador invites the participants to smell Aroma D. The aroma D corresponds to a smell that can be associated with fresh butter, brioche, and butterscotch. Thirdly and finally, the Brand Ambassador/presenter asks

the participants to smell the aroma then taste the Mumm Grand Cordon cuvée again, inviting them to express their reactions. The participants should normally experience the aromas of fresh butter/brioche more distinctly on the nose and palate after smelling the aroma on the scent stick. This aroma of fresh butter and brioche echoes the aromas developed during malolactic fermentation.

AROMA E:

The Brand Ambassador/Presenter prepares the scent sticks for the participants with Aroma E. The sticks are then given to each participant individually. Firstly, the Brand Ambassador asks the participants to smell then taste the Mumm Grand Cordon wine with the standard glass. The aroma E corresponds to a smell that can be associated with beeswax and honey. Thirdly and finally, the Brand Ambassador asks the participants to smell the aroma then taste the Mumm Grand Cordon wine again, inviting them to express their reactions. The participants should normally experience the aromas of beeswax and honey more distinctly on the nose and palate after smelling the aroma on the scent stick. This aroma of beeswax and honey echoes the specific aromas of reserve wines that make up part of the blend of Mumm Grand Cordon wine. Reserve wines bring aromatic complexity to the blend and also help us to identify the aromatic signature of Mumm Grand Cordon cuvée from one year to the next. Some of the reserve wines that make up Grand Cordon wine are aged in oak barrels. During the experience the Art of Blending is highlighted because it's fundamental to understand the wines. The blending takes place between December and March, when the tasting committee meets the cellar master to decide on the blend for the "clear" wines that make up the final cuvée. Mumm Grand Cordon is therefore blended from over 100 different crus, from the three grape variety typical of Champagne (Pinot Noir 40-50%; Chardonnay 25-35% - Meunier 20-30%, from different crus (e.g. Verzenay, Cramant, Avize and Mailly) and wines from different years. In the next chapter the sight and touch will be emphasized due to the introduction of two glasses.

4.3 Experience with the glasses

The next step of the experience is to introduce the two glasses which have been designed exclusively for *Taste Encounters with Mumm*. At this stage, where all the five senses are involved, perceptions are noticeably accentuated. The two glasses are very different due to their shape and texture but at the same time they are also very complementary.

Frosted glass: a glass that seems to be iced on the outside, given its white color. The stem is fine, with clear, almost sharp angles and the aluminium base - smaller and thinner

than the classic Mumm glass - makes it very light. It has been designed to reveal the freshness and tension of the wine and the tangy, fresh fruit aromas. It brings structure and power to this emblematic cuvées. It also gives the wines a beautiful aromatic complexity around fruitiness and delicacy. This new tasting ritual allowed to bring out the freshness of the wine, highlighting the notes of citrus and grapefruit.



Figure 6-Frosted glass

The frosted glass enhances the fruitiness and acidity of the wine tasted

Coloured glass: this is a smooth glass, tinted with dense violet. The stem is thick, and the polished stainless-steel base is smooth to the touch and weighted, making it much heavier than a standard glass. It has been designed to reveal the aromatic depth of the wine, the richness of stone fruits, and the maturity.



Figure 7- Coloured glass

The coloured glass is used to enhance the ageing notes of the wine tasted

4.4 Key messages of the cuvée

The four selected cuvées were chosen after several tasting tests between the designer, the cellar Master and the neuroscientist. This means that some wines, given two glasses, did not allow to obtain the same results. This specification, like any wine, is strongly influenced by the glass used and more generally by the surrounding environment. As can be seen from the wines used for *Taste encounters with Mumm*, they all have one element in common: Pinot noir. This also underlines the importance of Pinot Noir, as the grape signature of Mumm and the desire to put it at the center of the experience, increasing the sensory characteristics.

Mumm Grand Cordon

- Cuvée that embodies the power and elegance of Pinot noir, it is the “Big brother” of Mumm Cordon Rouge but here the ageing process is longer, more reserved wine (part of them aged in oak barrels)
- Blend: 40-50% Pinot noir, 25-35% Chardonnay, 20-30% Meunier, selected in the emblematic crus of Maison Mumm from Montagne de Reims (Pinot Noir) and Côte des Blancs (Chardonnay)
- Dosage: 8 g/l
- Tasting notes:

Nose: notes of ripe peaches, apricots and pineapple, with hints of vanilla and pastry, dried fruits, yeast and honey

Mouth: structured champagne with intense and complex flavors of fresh fruits. Long, powerful and fresh finish

Mumm Grand Cordon Rosé

- This rosé champagne displays the power and structure of Pinot Noir grapes, with elegant red-fruit aromas and assertive spicy notes.
- Blend: 60% Pinot Noir, 22% Chardonnay, 18% Meunier - selected in the emblematic crus of Maison Mumm from Montagne de Reims (Pinot Noir) and Côte des Blancs (Chardonnay)
- Dosage: 6 g/l
- Tasting notes

Nose: Notes of candied berries, with a bit of sweet spice

Mouth: Flavors of fragrant summer fruits and a long, bright finish with the succulent sweetness of red berries

Mumm Millésimé 2013

- This cuvee is rich and displays all the elegance of Pinot Noir, its generosity and finesse. It shows off the grape's present state of grace, while pointing out toward its future.
- Year 2013: after an exceptionally cool spring, the summer was hot, sunny and stormy. Late flowering in July pushed the harvest back to October. Happily, the grapes were healthy and showed perfect maturity.
- Blend: 74% Pinot Noir, 26% Chardonnay
- Dosage: 6 g/l
- Tasting Notes:

Nose: aromas of fresh white and stone fruits – a hint of pear is perceptible. Alluring floral notes give way to delicious nuances of brioche, fresh-churned butter and fresh hazelnuts.

Mouth: flavors of peach and greengage plum. The wine shows elegant balance, delighting with its long finish and a lively finale that hints at pastry and buttery brioche.

Mumm RSRSV Blanc de Noirs 2013

- Cuvée: reserved for Maison Mumm's Friends and produced in limited quantities, this wine is elegant and complex with a great character
- Blend: Pinot Noir from Verzenay, 100% grand cru
- Dosage: 6 g/l
- Tasting notes

Nose: subtle peach in syrup and dried fruit aromas with light notes of spice and vanilla

Mouth: full and harmonious palate with complex aromas and wonderful minerality

 MUMM GRAND CORDON KEY MESSAGES The art of blending and the role of the cellar master. The importance of terroirs TASTING EXPERIENCE <i>With standard glass</i> A fruity, powerful, generous wine TASTING EXPERIENCE <i>With frosted glass</i> Bring back all the tension and minerality of the wine, with fresh fruit aromas PINOT NOIR The backbone of the cuvée, the structure that gives power and smoothness to the wine.	 MUMM VINTAGE 2013 KEY MESSAGES The art of vintage, the expression of one year, the decision of the cellar master TASTING EXPERIENCE <i>With standard glass</i> A rich, mature and "foodie" wine TASTING EXPERIENCE <i>With frosted glass</i> Bring back the freshness in the centre of the glass, enjoyable acidity and confirms ageing potential PINOT NOIR The Pinot Noir set up the House's style in this cuvée, boosted by the Chardonnay.	 MUMM GRAND CORDON ROSÉ KEY MESSAGES The art of making rosé, the role of Pinot Noir as red wine TASTING EXPERIENCE <i>With standard glass</i> A citrus fruit, red berries, fresh enjoyable cuvée. TASTING EXPERIENCE <i>With coloured glass</i> Going deep down into the evolution of aromas from red berries to black berries typical from Pinot Noir PINOT NOIR Fruity evolution, structure and aromas complexity to offer a "foodie" wine here.	 RSRV BLANC DE NOIRS 2009/2012 KEY MESSAGES 100% Pinot Noir from Verzenay historic terroir, Mumm's savoir-faire, Ageing potential TASTING EXPERIENCE <i>With standard glass</i> Generous, elegant, full maturity here TASTING EXPERIENCE <i>With coloured glass</i> A photography of the wine 5 years ago <i>With prune glass</i> A photography of the wine in 5 years PINOT NOIR A time journey to understand the complexity, the elegance, the potential of PN from on the best Champagne terroir.
---	--	---	---

Figure 8 Key Messages of each cuvée

Each cuvée is presented, highlighting the Pinot Noir and glass properties.

5. THE IMPORTANCE OF THE WINE GLASSES

Wine was originally consumed. Over the centuries these vessels ranged from baked clay goblets, timber and bronze tankards to pottery goblets and animal horns (A Brief History of the Wine Glass, 2022). Around the 2000 BCE in Mesopotamia, we can find the first glass which was used by the aristocracy as a container for beauty purposes. The first record of glass as a drinking vessel dates to 79 CE when Pliny the Elder wrote about the suitability of glass as a drinking vessel shortly before his death. A step further was made in 1400 CE when the shape of the wine glass appears in Italy and specifically in Venice (A Brief History of the Wine Glass, 2022). At this time the wine glass was finally composed by a bowl, a stem and a base as we are used to today. It is important to remember that until then the glass was not clear and only in the 1455 that thanks to an Italian artist Angelo Barovier which develops a technique to produce clear glass. When we talk about wine, we think straight away about the glass with the stem but in the past, this was not the case. The glass most commonly used for wine would have resembled to a shot glass. Only at the end of the eighteenth century, the glass with the stems was introduced, at the moment when wine also began to be the one of the main characters of the tables. The traditional glass becomes very popular for two reasons mainly: for the design and elegance of the stem but also for a more practical reason, to maintain a

constant temperature for longer and not to heat the glass too much. The next step was to create specific glasses based on the type of grape variety present, enhancing its properties and flavors. During the last decade however, more and more wine glass types appeared on the market, which were designed to optimize flavor perception. In the 20th century, Claus Riedel was the first to acknowledge a correlation between the shape of the wine glass and its influence on tasting. He then completely changed the style of wine glasses to blown, uncoloured and very thin glasses. After that, he launched the « *Sommeliers* » collection, the first series of glasses based on the style and character of each wine. Nowadays, Riedel is still one of the world's leading glass brands. In the 1970s, the INAO wine glass became the reference glass for professional wine tastings.

It is important to remember how the wine is strongly influenced by the environment so that the same wine poured into two different glasses can provide different sensations. This is also the reason why today there are glasses for every style and variety of wine on the market. In the 1950s, Claus Riedel, a famous Austrian glassmaker, had already noticed how the shape of a glass played a fundamental role in tasting a wine. For this reason it was used to invite his friends, and make them drink the same wine from different glasses. The aim was then to understand the differences between one glass and another and create the most suitable glass for the specific sensorial profile of the wine.

6. THE NEW FORM OF WINE TOURISM

Wine tourism has evolved over the last few decades because of the competitiveness between the wine producing destinations. Although the first definitions mentioned that wine tourism was more than a simple visit to the vineyards and wine producers (Hall et al. 1996; Hall and Macionis 1998), wine tourism has extended its offer with complementary services such as wine festivals, wine shows, wine museums, winery architecture, gastronomy, accommodation, and leisure activities within the winery facilities and in a landscape related to wine (Bruwer and Rueger-Muck 2019; Kruger and Viljoen 2021). This growth of wine tourism as a lever for wine producing regions has aroused great interest among researchers, considering the amount of scientific work dedicated to this theme in recent years (Gómez, Pratt, and Molina 2019; Leri and Theodoridis 2019; Thanh and Kirova 2018).

Wine sensory experience (WSE) is a wine tourism and marketing construct validated by the scientific community, which has boosted scientific investigation about this issue (Santos et al., 2021). This phenomenon is due to the potential that wine itself has a role

as main attraction in wine tourism destination. WSE relates the intersection between wine tourists and winemaking activities. WSE is conceptualized as a need to experience wine tourism attracting current and potential visitors, totally covering the wide spread of wine tourism destinations both in the Old World and New World and is growing worldwide. WSE is mainly described in terms of colours, smells, sounds, textures, tastes, flavours, sight and touch, empowering simultaneously these interplays in hedonic and holistic ways, occurring mainly in the context of a winery (Santos et al., 2020). Thanh and Kirova (2018) highlighted the holistic perspective focused on the visitors' experience in relation to wine tourism activities and wine regions.

Wine tourists undoubtedly seek appealing, exclusive, and memorable wine sensory impressions in the wine tourism settings. Wine potentiates an amalgam of multisensory experiences engaged in wine tourism activity. It also co-creates a higher value enriching a higher WSE level and boosting behavioural intentions during the visits. It has been determined that wine tourists expect the best wine sensory appeal experiences (Santos et al. 2021). Within this context, wine tourists are predominantly wine consumers looking for pleasurable wine senses. Wine sensory stimulation originates in tasting wines and the appreciation of its main characteristics: the wine smells nice, tastes good, looks nice, and therefore activates these sensory stimuli. This incites a total engagement in greater novelty and sensory activities, which are of paramount importance to the success in a winery visit experience (Santos et al. 2019). Given this, WSE is a useful construct that has become vital to sustained success and has to be seen as a key concept of wine tourism management and marketing in the future and in wine tourism related travel.

Some wine regions, however, are more appealing than others, due to the position they have achieved in the mind of wine lovers, and to the wines they produce and their history (Bruwer and Gross 2017). Regarding these more established wine regions, the tourist begins to 'feel' the visit, creating specific expectations, even before it happens, which makes him more open to the experiences that await him (Bruwer and Alant 2009). Thus, winescape must be seen as a scenario where all the components fit, in the sensory narrative with which it is intended to involve the visitor, through the winery and its architecture, the surrounding vineyards, but also the region's heritage, normally framed in a rural context (Mitchell, Charters, and Albrecht 2012). This relationship between the role of winescape as a mediator of sensory attraction and wine involvement is not yet fully explored in the literature. Theoretically, it is highly knowledgeable wine

tourists that expect the best wine visits experiences (Santos et al., 2020; Brochado, Stoleriu, and Lupu 2019).

7. SENSORIAL EXPERIENCE AND WINE DESTINATION

Wine tourists seek authentic and quality experiences, which are personal constructs that are difficult to articulate and define. With so many wine destinations to choose from that often share similar markets and environments, it can be difficult for hosts to create a unique destination identity (Esau and Senese, 2022). As wine consumers gain experience, these multiple exposures generate sensory cues for consumer preference that create expectations (Goode, 2016) for future wine experiences. The sensory experience of a wine destination is one of the most powerful tools available to help individual consumers identify the destination's unique and distinct characteristics (Guzel & Dortyol, 2016). However, the question remains: do the sensory experiences of wine regions help form a unique identity that visitors can personally identify with to create personal recognition and differentiation? Wine tourism experiences result from the cooperation between tourism and agriculture (Carmichael, 2005), and is commonly motivated by the destination (wine region), the activity (wine tasting) or both (Brochado, Stoleriu, & Lupu, 2021). Wine tourism is also an embodied sensory experience that involves not just the sensory experience of the wine itself, but also an indulgence in the sensory attributes of the wine region, or 'winescape' (Hall et al., 2009). The multisensory exposure within wine regions influences the overall experience of a wine tourist (Heide & Grønhaug, 2006) that can provide distinct, memorable experiences that differentiates the provenance of one wine region from another in the mind of the individual (Brochado et al., 2021). Consumers are seeking to identify with what they consume and are more likely to prefer something if it provides a sense of self and personality (Warde, 1994), including experiential consumption. This framework helps to understand how consumers explore wine destinations using their past experiences to search for symbols and experiences that are representative of their personal identity (Esau, 2019). For the experience to be authentic, a tourist needs to develop a reality that contrasts with their daily realities and pursue an authentic sense of self (Kim & Jamal, 2007), which creates what Wang (1999) refers to as existential authenticity. These types of experiences need to be meaningful to an individual seeking something they can personally relate to (Askegaard & Linnet, 2011), and this can be obtained through activities that are slow, small, and local (Ateljevic, 2020). Through the interaction with these authentic and meaningful experiences, tourists create destination identity through a personal interpretation of the sensory information about the destination (Mayo & Jarvis, 1981). Through this engagement

with a specific place using sensations and emotions, a destination experience can be formed (Güzel, 2013).

8. RESULTS AND THE PROPOSAL

Taste Encounters with Mumm is now composed by the flagship experience and the trade experience. The flagship experience is an olfactive experience with Mumm Grand Cordon followed by a tasting experience with 2 to 4 cuvées and the two glasses. Also, there is the option to have a food pairing and special vintage cuvée. This is hosted physically or digitally depending on market and sanitary situation due to covid-19. The experience is generally supported by the local Brand Ambassador for hosting and coordination. The trade experience is an adaptation of the Flagship experience, featuring olfactive and tasting immersions, hosted by Brand Ambassadors and trained sales team, to target regional media, influencers, key on-trade and off-trade accounts, High Net Worth Individual (HNWI) and final consumers.

This sensory experience could be amplified by reaching the final consumer. In fact, one of the questions that is often asked at the end of the tasting is the possibility of buying the kit of glasses with aromas. I therefore believe that there is a desire from the audience to share the experience with family and friends. The kit would be composed by the two glasses and the five aromas.

The approach

This would be an ownable tasting experience to enable the consumers to discover the complexity of Mumm's champagne at home, with friends, supported by engaging digital contents

How

Mumm Taste Encounters kits including glasses and bottles will be sold through e-commerce platforms, exclusive off-trade partners and Mumm's boutique in Reims. In addition, the experience could use digital content on the new Mumm's platform to live the experience with Laurent Fresnet, Gabriel Lepousez and Octave De Gaulle.

A 3-LEVEL EXPERIENCE

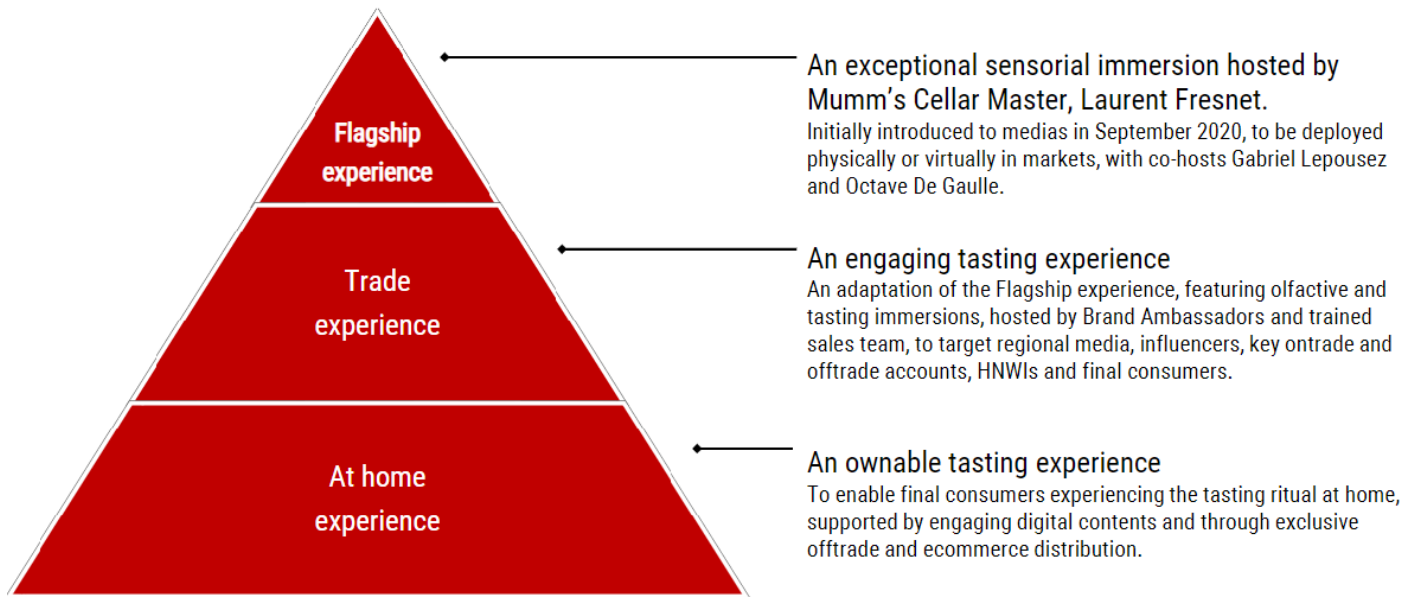


Figure 9 A 3-Level Experience

Taste Encounters with Mumm: The level of the experience

9. CONCLUSION

This paper has shown the importance of the five senses in the wine industry. Wine is defined as one of the most complex elements that exist in nature because it speaks to all five senses. In the last decade, the market has greatly invested in sensorial experiences. Due to the constant need to create unique in-store experiences for customers, sensory marketing has gained significant popularity over the past few years due to its ability to provide a point of difference among stores. According to a study on neuromarketing conducted by The Rockefeller University, our capacity to remember our sensory experiences is: 1% of what we touch, 2% of what we hear, 5% of what we see, 15% of what we taste and 35% of what we smell. The purchase of a product or service is therefore influenced by many factors, both internal and external. Sensorial marketing plays a key role in the customer's journey because it focuses on the five senses, generating an emotional response. In recent years oenotourism has grown considerably, offering tourists a personalized proposal based on their needs. After Covid 19, the need for an authentic and creative experience that was not limited to a simple visit to the cellar has created an increase in competitiveness between wine regions and between wineries. Maison Mumm, with *Taste Encounters with Mumm*, wants to show the sensorial effect and the importance also of the glass on the wine perception. Indeed, the weight, the color, the shape, the texture of the glass might change the final perception and appreciation of the wine. Taking *Taste Encounters with Mumm* as one of the best examples of sensorial Marketing, this thesis underlines the amplified effect of the senses on the wine perception and the importance of the sensorial marketing in the future, as one of the main assets to retain customers. As noted by Krishna, 2012, sensorial communication increases the chances for information transfer from short-term memory into long-term memory. This experience was born with the intention of showcasing Mumm's wine identity and (re)discover the House's cuvées. Also, Mumm feels the need to reach the customers with an innovative and unique approach which was never experienced before. With *Taste Encounters with Mumm*, the House can also highlight his wine credentials and oenological credibility. Finally, *Taste Encounters with Mumm* offers educational and engaging "ready-to-use" experience to be activated in market at various levels (trade, sommelier, consumer) . Sensorial marketing aims to build the brand loyalty and it has been noticed how the more senses are engaged the more changes the brand has be remembered, working on the long-term memory. *Taste Encounters with Mumm* is now only accessible to a limited group of people (sommelier, Influencers, journalists) but I believe this experience can take a step further by being offered to the public in specialized wine shops. Thanks to this experience, Maison Mumm was able to reposition itself and his cuvée giving a boost to the Brand credibility.

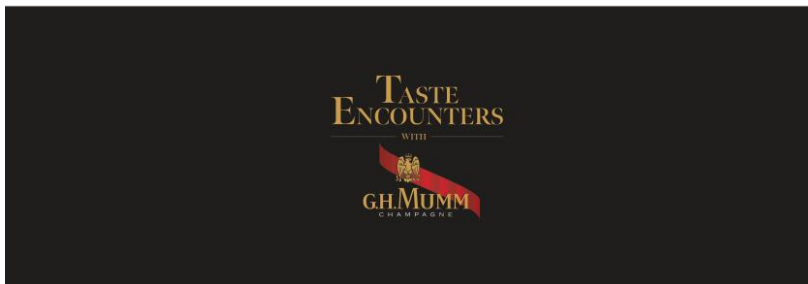
10. BIBLIOGRAPHICAL REFERENCES

- Askegaard, S., & Linnet, J. T. (2011). Towards an epistemology of consumer culture theory: Phenomenology and the context of context. *Marketing Theory*, 11(4), 381–404. <https://doi.org/10.1177/1470593111418796>
- Ateljevic, I. (2020). Transforming the (tourism) world for good and (re) generating the potential 'new normal'. *Tourism Geographies*, 22(3), 467–475.
- Brochado, A., Stoleriu, O., & Lupu, C. (2021). Wine tourism: A multisensory experience. *Current Issues in Tourism*, 24(5), 597–615.
- Campo, R., Reinoso-Carvalho, F. and Rosato, P., 2021. Wine Experiences: A Review from a Multisensory Perspective. *Applied Sciences*, 11(10), p.4488.
- Carmichael, B. (2005). Understanding the wine tourism experience for winery visitors in the Niagara region, Ontario. Canada. *Tourism Geographies*, 7(2), 185–204.
- Esau, D. (2019). The taste of a label: Do visual sensory cues on a wine label impact the sensory taste of the wine? (T) (p. 0378470). University of British Columbia.
- Esau, D. and Senese, D., 2022. The sensory experience of wine tourism: Creating memorable associations with a wine destination. *Food Quality and Preference*, 101, p.104635.
- Esau, Darcen. (2019). The taste of a label: do visual sensory cues on a wine label impact the sensory taste of the wine?
- Goode, J. (2016). *I taste red: The science of tasting wine*. Oakland, California: University of California Press.
- Güzel, F.O. " (2013). The effects of sensory based positive emotions and feelings on post purchasing behaviour: A research on German tourists. *Anatolia: Turizm Arastirmalari Dergisi*, 24(2), 226–236.
- Guzel, O., & Dortyol, T. (2016). Exploring the multi-sensory based memorable tourism experiences: A study of Adam & Eve hotel in Turkey. *Journal of Marketing and Consumer Behaviour in Emerging Markets*, 2 (4), 28–39.
- Hall, C. M., Johnson, G., Cambourne, B., Macionis, N., Mitchell, R., & Sharples, L. (2009). In *Wine tourism: an introduction* (pp. 1–23). Routledge.
- Hulten, Bertil. (2017). Branding by the five senses: A sensory branding framework. *Journal of Brand Strategy*. 6. 1-12.
- Kim, H., & Jamal, T. (2007). Touristic quest for existential authenticity. *Annals of Tourism Research*, 34(1), 181–201.
- Koszembar-Wiklik, M., 2022. *Sensory Marketing – Sensory Communication and Its Social Perception | Communication Today*. [online] Communication Today. Available at: <<https://www.communicationtoday.sk/sensory-marketing-sensory-communication-and-its-social-perception/>> [Accessed 6 June 2022].
- Krishna, A., 2012. An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), pp.332-351.
- MUMM 2022. [online] Available at: <<https://www.mumm.com/en-us/the-house/maison-mumm/>> [Accessed 19 June 2022].
- On the “Predatory” Influence of our Eyes on the Taste of Wine. <https://www.winescholguild.org/>. Retrieved 4 May 2022, from <https://www.winescholguild.org/blog/on-the-predatory-influence-of-our-eyes-on-the-taste-of-wine>.
- Rajain, Pallavi & Rathee, Rupa. (2017). Sensory Marketing-Investigating the Use of Five Senses. 7. 124-133.
- Sensory Marketing: Straight to the Emotions. [online] Available at: <https://www.researchgate.net/publication/322593642_Branding_by_the_five_senses_A_sensory_branding_framework> [Accessed 6 June 2022].

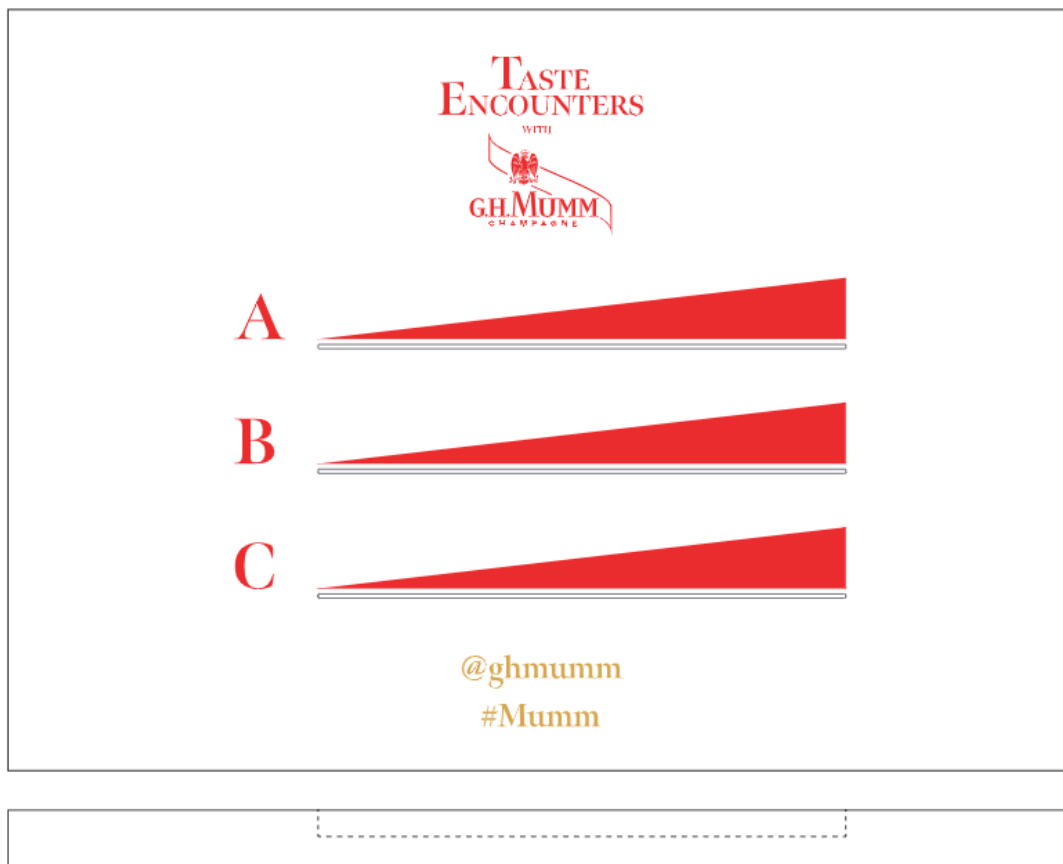
- Siegrist, M. and Cousin, M., 2009. Expectations influence sensory experience in a wine tasting. *Appetite*, 52(3), pp.762-765.
- Spence, C., 2019. Multisensory experiential wine marketing. *Food Quality and Preference*, 71, pp.106-116.
- Warde, A. (1994). consumption, identity-formation and uncertainty. *Sociology*, 28(4), 877–898. <https://doi.org/10.1177/0038038594028004005>
- WINE EXPERIENCE LAB. 2022. *The Wine Tasting "experience": Sensory marketing in the wine industry*. [online] Available at: <<https://www.winexplab.com/blog/the-wine-tasting-experience-sensory-marketing-in-the-wine-industry#:~:text=Engaging%20the%20multi%2Dsensory%20component,may%20no%20longer%20be%20enough.>> [Accessed 6 June 2022].

11. ANNEXES

A1. Taste Encounters with Mumm-Logo



A2. Taste Encounters with Mumm-Tasting Mat



A3. Taste Encounters with Mumm-Menu



A4. Taste Encounters with Mumm-Training session



A.5 Taste Encounters with Mumm-Questionnaire (<https://freeonlinesurveys.com/s/zUTHf5dK>)

Taste Encounters with Mumm

This form aims at collecting as much feedback as possible to evaluate the level of appreciation of Taste Encounters with Mumm. The answers will be anonymous and will be used for academical purposes.

1. What is your age?

2. What is your nationality?

3. What is your wine knowledge?

- ☐ Sommelier ☐ Oenologist ☐ Amateur
☐ Wine student
☐ Other (Please Specify)

4. Were you aware of the experience Taste Encounters with Mumm before?

- ☐ Yes ☐ No

5. Once the experience has started, what was the first thought?

- ☐ Skeptical ☐ Curious ☐ Interested
☐ Intimidated ☐ Confused
☐ Other (Please Specify)

6. Do you think the environment was suitable for the experience? (light, temperature, noise etc...)

0	1	2	3	4	5	6	7	8	9	10
Not at all										Extremely Good

7. Could you smell the aroma A (violet) ?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Extremely strong

8. Could you smell the aroma B (Damask rose) ?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Extremely strong

9. Could you smell the aroma C (citrus/bergamot) ?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Extremely strong

10. Did you recognize the aroma D (butter)?

- ☐ Yes, straight away ☐ Yes, but took me a while ☐ Not at all

11. After smelling the aroma D, were the buttery notes more distinctly on the nose and palate?

- ☐ Yes ☐ No ☐ Nothing has changed
☐ I don't know

12. Did you recognize aroma E (honey) ?

- ☐ Yes, straight away ☐ Yes, but took me a while ☐ Not at all

13. After smelling the aroma E, was the honey more distinctly on the nose and palate?

- ☐ Yes ☐ No ☐ Nothing has changed
☐ I don't know