

CREATING IN SCENT

A CONCEPTUAL FRAMEWORK FOR THE STUDY OF SCENT IN PRACTICAL APPLICATION

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Fig. 1: Max Burnett - RECOLLECT - Memory Bar - 2022

SMELL PIECE FOR YOKO #1

Sniff the air around your wrist

Weigh it in your mind

Describe the weight to a friend

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“Smell is a potent wizard, that transports us across a thousand miles, and all the years we have lived.”
- Helen Keller

INTRODUCTION

The sense of smell possesses an intriguing artistic potency by virtue of the unique merits Keller (*Keller, 1908*) describes. In this essay, I will construct a framework for the sense of smell as a medium of artistic expression, heritage and design.

I will do so in three parts - Part 1 will focus on my methodology, the scope and the limitations of this framework, my position as a researcher, and the positionality of this research. Part 2 focuses on existing theories and frameworks from relevant fields, drawing from recent publications about applied olfaction and olfactory philosophy. Part 3 is dedicated to several case studies, which means that the research assumes a predominantly pragmatic character, grounding the theoretical underpinnings in practical examples, thereby providing a deeper understanding of how the framework translates to reality.

In the appendages to this document, you will find additions to the core framework. Appendix 1 consists of a collection of references to olfactory artworks. Appendix 2 shows how the Mauritshuis used scent in an exhibition about Dutch 17th-century art. Appendix 3 is devoted to a personal account of working with scent, while Appendix 4 and 5 are a literature review and a broader reading list.

The main argument of this paper is that although several justifiable frameworks for scent already exist, the use of a constructivist framework for scent in artistic practice is most suitable, as it focuses on the subjective parameters of olfactory perception. In practices of art, design and heritage, we are often not interested in sensory perception per se but in the context of smell and the relationship a scent has to the perceiver. These factors can be understood and expressed most easily from a constructivist point of view.

As such, this paper will move from theory to practice, hopefully serving as a useful map for upcoming olfactory practitioners to devise their own conceptual framework. The second anticipated outcome is that this research will contribute to an idea of best practice for applying olfactory theory to artistic practice, and vice versa, will feed a practical understanding of the subject matter into academic discourse.

SMELL PIECE FOR YOKO #2

Lay on your back

Take the smell that rests on your chest

Bottle it and label it with the date

Keep it in a dark drawer

When you take it out

Remember how you feel now

METHODOLOGY

Larry Shiner's "Art Scents: Exploring the Aesthetics of Smell and the Olfactory Arts" (Shiner, 2020) has successfully argued for the aesthetics of olfactory art, removing a significant barrier to its acceptance as an artistic medium. The aim of this framework is to go even further and position olfaction as an artistic medium, not just in theory, but in existing practice.

To create this framework I am applying a mixed methodology to the broader field of olfaction: I will 1) review relevant literature on the subject, 2) explore the current debate around the sense of smell. 3) examine conceptual and philosophical frameworks commonly used to understand scent and demonstrate how these frameworks affect our understanding of scent. Ultimately I will argue for a constructivist framework for applied work with scent. In doing so I will provide a rationale for the analysis of several case studies, in which the theoretical framework is practically applied, overall providing a non-conclusive, but broad picture of the field of olfaction, delimited to the period spanning from the start of the sensory turn until the present. (see fig. 3)

As an olfactory artist, perfumer, and researcher, I have been part of the growing olfactory art scene since 2014. In 2020 and 2022 I was nominated as a perfumer in the Sadakichi category of the Art and Olfaction Awards (*The Annual Art and Olfaction Awards, 2020 & 2022*). I have experienced the changing attitudes towards scent firsthand and conducted practice-based research as an "insider" and participant in the field (*Hanula, Suaranta, Vadén - 2014*).

While I acknowledge my partiality towards the medium, I hope to present a balanced and objective argument for the potential of scent as a medium for art and design and offer a comprehensive analysis of olfactory art and its surrounding debates.

Fig. 3: An overview of the subquestions and literature feeding into this framework

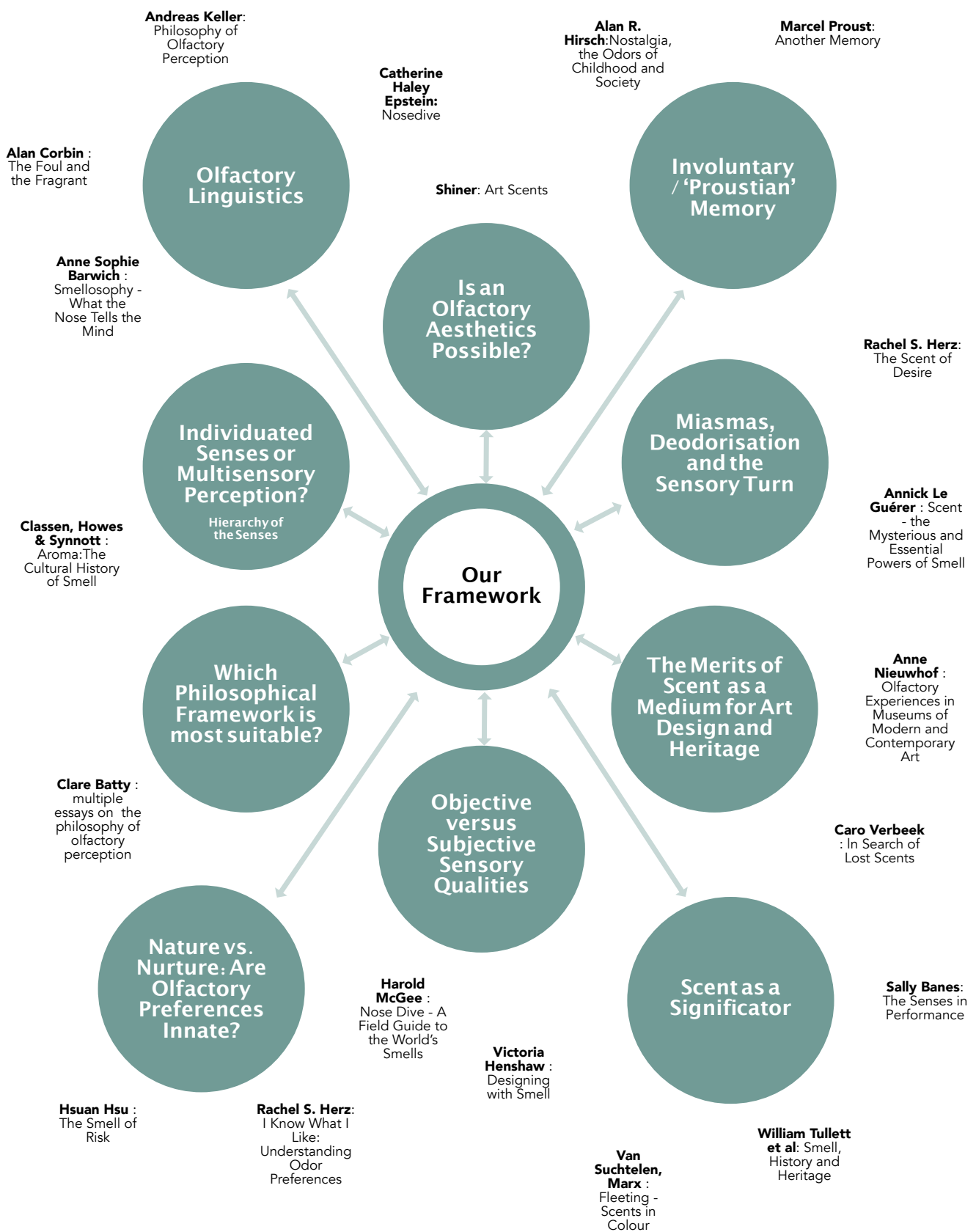


Fig. 2: A visual representation of the research questions and theories feeding into this conceptual framework

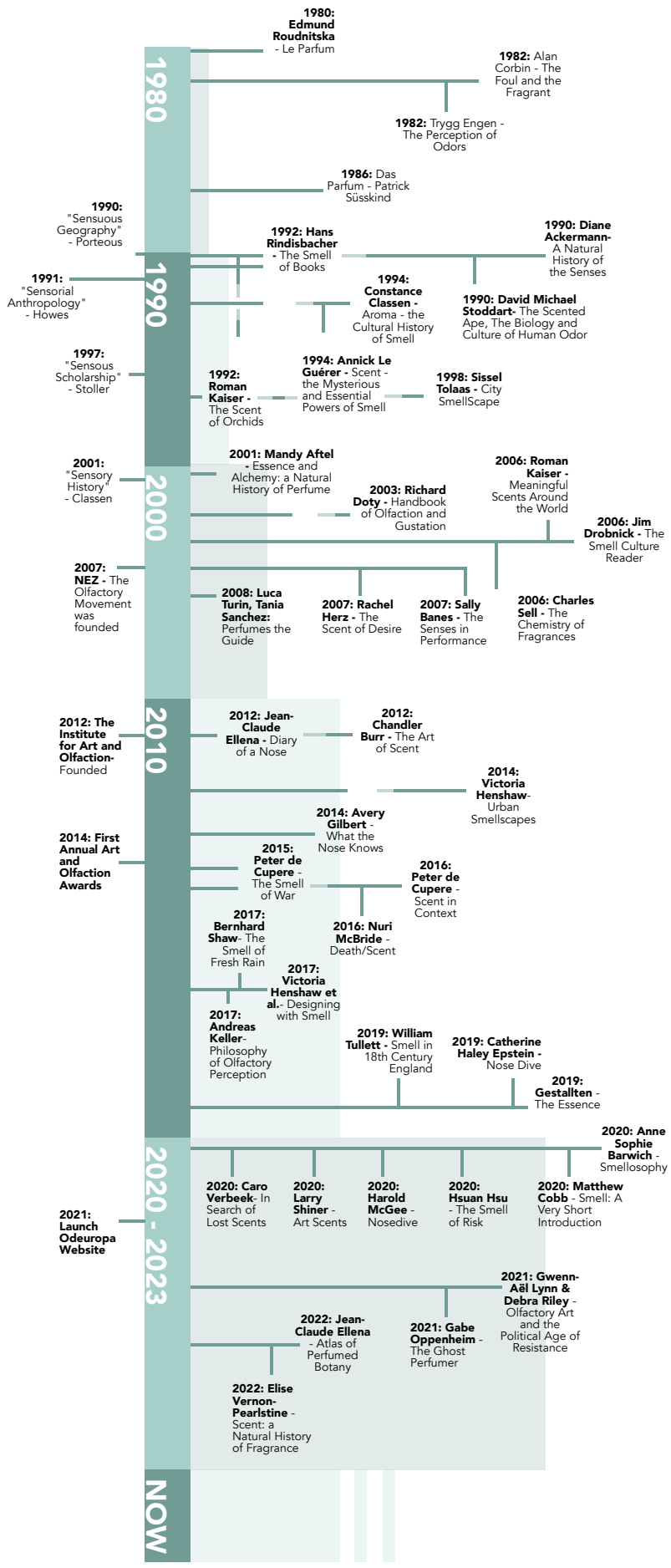


Fig. 3: A timeline of important olfactory publications - illustrating the period of the sensory turn until the present day

EXISTING FRAMEWORKS AND SHIFTING PARADIGMS

Prior to the 21st-century sensory turn, scent was considered a "lower" sense in a system of five individuated senses (*Verbeek, 2021*). However, in recent years, there has been a paradigm shift towards a more dynamic understanding of the human sensorium, often referred to as "The Sensory Turn." This shift is supported by numerous researchers, such as Anne Nieuwhof, who argues that the turn started with artists such as Duchamp and Warhol, as well as the Symbolists, Futurists, Dadaists, and Surrealists, who directed their attention towards the olfactory sensorium (*Nieuwhof, 2016*).

The 1990s saw the emergence of the "pictorial turn" (*Mitchell, 1994*) and the "ikonische Wendung" (*Boehm, 1994*) following earlier linguistic, cultural, and pictorial turns (*Lauwrens, 2012*). According to Drobnick's 'Smell Culture Reader' (*Drobnick, 2006*), growing discourse around olfactory perception was catalysed by two seminal publications in the 1980s, 'The Foul and the Fragrant' (*Corbin, 1986*) and 'Das Parfum' (*Süskind, 1985*), which paved the way for a first wave of olfactory research.

Complications and Limitations

In constructing a conceptual framework for applied olfaction, some complicating factors arose, that warrant being addressed, before we move to considerations on useful frameworks.

Firstly, the olfactory pathway of the brain does not lead through the parts responsible for language, making it challenging to describe olfactory stimuli (*Majid, 2015*). Nevertheless, research suggests the issue lies in the way some languages have developed, and our brains are equipped to deal with olfactory language if it is present (*Majid, 2021*).

The lack of olfactory language nonetheless poses a significant challenge in creating a conceptual framework for scent. Unlike vision and hearing, which have extensive vocabularies to describe and communicate sensations, the olfactory sense lacks a robust language (*Ackerman, 1990; Olofsson & Gottfried, 2015*).

The limited, imprecise, and subjective words used to describe smells make it difficult to articulate and communicate the nuances of olfactory experiences (*Bradley, 2015*). This language barrier can impede the ability of artists, designers, and scholars to work with scent and express their ideas and theories about it. Additionally, it can create a barrier for audiences to understand and appreciate olfactory works, as they may lack vocabulary to describe their experiences.

Absence of language for the "mute sense" (*Ackerman, 1990; Olofsson & Gottfried, 2015*) also complicates the articulation of scent's impact on society (*Bradley, 2015*). However, there is evidence to suggest the lack of olfactory language is culturally dependent. (*Majid, 2015*)

To address the challenge of the lack of olfactory language, some scholars suggest using a cross-modal system to increase our olfactory vocabulary (*Verbeek, 2012*), while others argue that our linguistic resources are adequate for serious aesthetic discussions (*Shiner, 2021*). Evidence from other cultures demonstrates that connection between scent and language is not problematic for innate human capability, although it remains a challenge in most Western societies (*Classen, 1994*).

Developing a more nuanced and precise olfactory language is critical to creating a philosophical framework for scent, as this would enable a more nuanced understanding of olfactory experiences, facilitate communication and exchange of ideas about scent, and ultimately enhance olfactory appreciation and understanding.

The second challenge in creating a philosophical framework for scent is the unfair stigmas and reputations that have affected it. These negative attitudes towards scent were largely shaped by the 18th-century deodorisation movement, which led to decreased attention and tolerance for strong smells, and the miasma theory, which associated scent with disease and death (*Classen, 1994*).

Despite advances in technology and a greater understanding of the role of scent in human perception, past ideas about scent have had a lasting impact. The subjectivity of scent and lack of vocabulary associated with it led influential thinkers to consider it inferior and exclude it from aesthetic debates since the 18th century (*Verbeek, 2021*).

While historical sources indicate that our ancestors valued scent in their societies, the cultural determination of olfactory perception means our understanding of past cultures is limited by our ability to interpret olfactory experiences (*Van Suchtelen, 2021, Appendix 2*). Limited olfactory descriptions in historical records also suggest that a lack of olfactory language and negative attitudes towards scent have impacted our ability to document the historical significance of this sense (*Odeuropa Explorer, 2023*).

Therefore, it is crucial to overcome stigmas associated with scent and develop a more nuanced and precise olfactory language in order to gain a better understanding of the impact of scent on society and history. This would allow for a more comprehensive and accurate interpretation of olfactory experiences in historical and cultural contexts, and facilitate communication and exchange of ideas about scent in the present-day.

Thirdly, our sense of smell is a multifaceted sensory experience that involves not only the olfactory system but also other sensory modalities, such as taste, touch, and vision. These multi-sensory interactions can affect how we perceive and interpret scent. Various factors can affect our perception of smells, as shown in Lygum's description of Nacadia. Soil conditions, water, vegetation, season, time of day, and activities can impact the actual smell (*Lygum, 2018*). Endogenous variables, such as age or drug use, can also affect our perception of smells (*Guido et al., 2016*). Therefore, a conceptual framework for scent development must consider not only the olfactory system but also other sensory modalities.



Fig. 5: Multi-sensory factors contributing to our perception of smell



Fig. 5: Wim T. Schippers, *Pindakaasvloer*, Museum Boijmans van Beuningen, 1969

This also implies the environment can influence the way we perceive a scent. For example, if an exhibition space feels damp and looks old, the scent of mushrooms may trigger associations with moisture problems. (Appendix) Additionally, information we have about a smell can alter our perception of it (Herz, 2006). A study demonstrated that verbal labels attached to a smell can create olfactory illusions (Herz et al., 2016), which can be seen in practice in Etat Libre d'Orange's perfume 'Secretions Magnifique'- which is said to reference the smells of bodily fluids (*Etat Libre d'Orange, Fragrantica*). Meanwhile, Arshamian et al. (Arshamian, 2022) found olfactory preferences to be stable across cultures. Rachel Herz (Herz, 2011) further indicates that our likes and dislikes for scents are often based on emotional associations.

Fourthly, scent is an elusive and subjective phenomenon that is difficult to describe or quantify. While there are some shared experiences and associations with certain scents, each individual's olfactory system is unique, resulting in a highly personalised perception of scent. The associations triggered by scents can cover a much broader range of, sometimes even abstract, meanings. (Keller, 2017) Therefore, creating a universal framework for scent requires navigating the subjectivity of individual perception as well as the fluidity of undetermined olfactory entities. (Skrzypulec, 2019)

As a result of the sensory turn, there was a shift in the discourse regarding scent's ability to convey information and its credibility as a rational sense, with the previous view of these complicating factors as limitations giving way to an appreciation of their unique qualities as potential merits. This shift paved the way for modern artists to recognise scent as a viable medium for artistic expression. Scent is no longer viewed as a mere complement to other materials, but as a distinct form of creative expression.

We can identify a shift of scent as byproduct of an artistic expression to scent being used as a more purposeful medium. Notably, Wim T. Schippers' "Pindakaasvloer" (Schippers, 1969) was created as a commentary on Dadaist art, yet the unprecedented smell generated by the 48 square meters of peanut butter was a highlight in museum context (Strating, 2018). Similarly, Zeger Reyers' "Rotating Kitchen" (Reyers, 2009) intentionally utilises falling spices from slowly rotating kitchen cabinets, making scent an integral part of the artwork. (For more examples, see Appendix 1)

Modern artists are now recognising the distinctive value of scent as an artistic medium and are exploring scent as a standalone form of creative expression. This attention from artists, the academic basis established by the sensory turn and societal appreciation for scent because of its nondigitizable and experimental qualities, create the conditions for scent to emancipate into a more fleshed-out design medium.

Indeed, academic research and publications on this subject have seen an upward trend. The Olfactory Reading List (Appendix 6), which compiles (semi-) scientific books focusing on olfaction, currently includes 165 titles spanning various sub-disciplines such as perfumery, neurology, philosophy, and sociology. While the list is not exhaustive and lacks absolute selection criteria, a graph suggests an increase in olfactory publications since the turn of the century.

The emergence of movements such as the Institute for Art and Olfaction, the first Art and Olfaction Awards in 2014 (*The Institute for Art and Olfaction, 2012*), and NEZ, the Olfactory Movement, initiated in 2007, (*Fragrance Foundation, 2023*) marks a significant shift towards scent-culture worldwide. This trend coincides with the peak in olfactory publications, illustrating the growing appreciation for scent. (fig.

This attention brings several discussions to the forefront: from Chandler Burr, (*Burr, 2012*) who argues that perfume, which we usually see as a commodity, is in fact an artistic expression, to Saskia Wilson-Brown, (*Wilson Brown, S., Marin, K. - 2022*) who explores potential new models for trademarking perfume as intellectual property.

Modern olfactory discourse is indeed broad and varied, and there are many bodies of work to choose from. After earlier writing of Corbin (*Corbin, 1986*) and Classen (*Classen, 1994*) 'The Smell Culture Reader' is an exemplary document, containing 36 pieces of writing, grouped into seven parts, covering topics such as the sociology of odors, olfactory pleasure, nostalgia, and odor preferences. (*Drobnick, 2006*). In a book published in the same year, Sally Banes explores the role scent can play in the context of performance. (Banes..)

These developments demonstrate how, during the sensory turn, our understanding of olfactory perception evolved from hierarchical, visual-based systems to a more complex understanding, resulting in numerous insights and applications

A more current exploration of the merits of scent is the work of Odeuropa, who facilitated a conversation between researchers in the field of olfaction and heritage, 'Smell, History and Heritage' (*Tullett et al, 2022*). The document explores scent from different perspectives, asking researchers specifically about their outlook on olfaction. As the contributing researchers come from a wide variety of backgrounds, the accounts for scent as a tool for heritage reflect that.

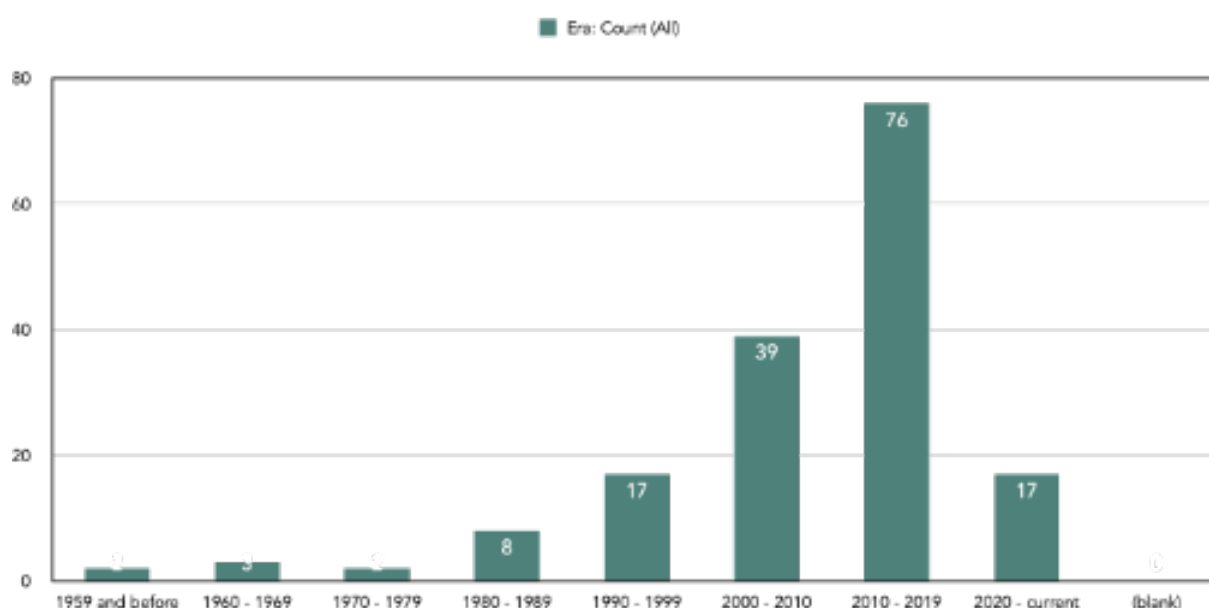
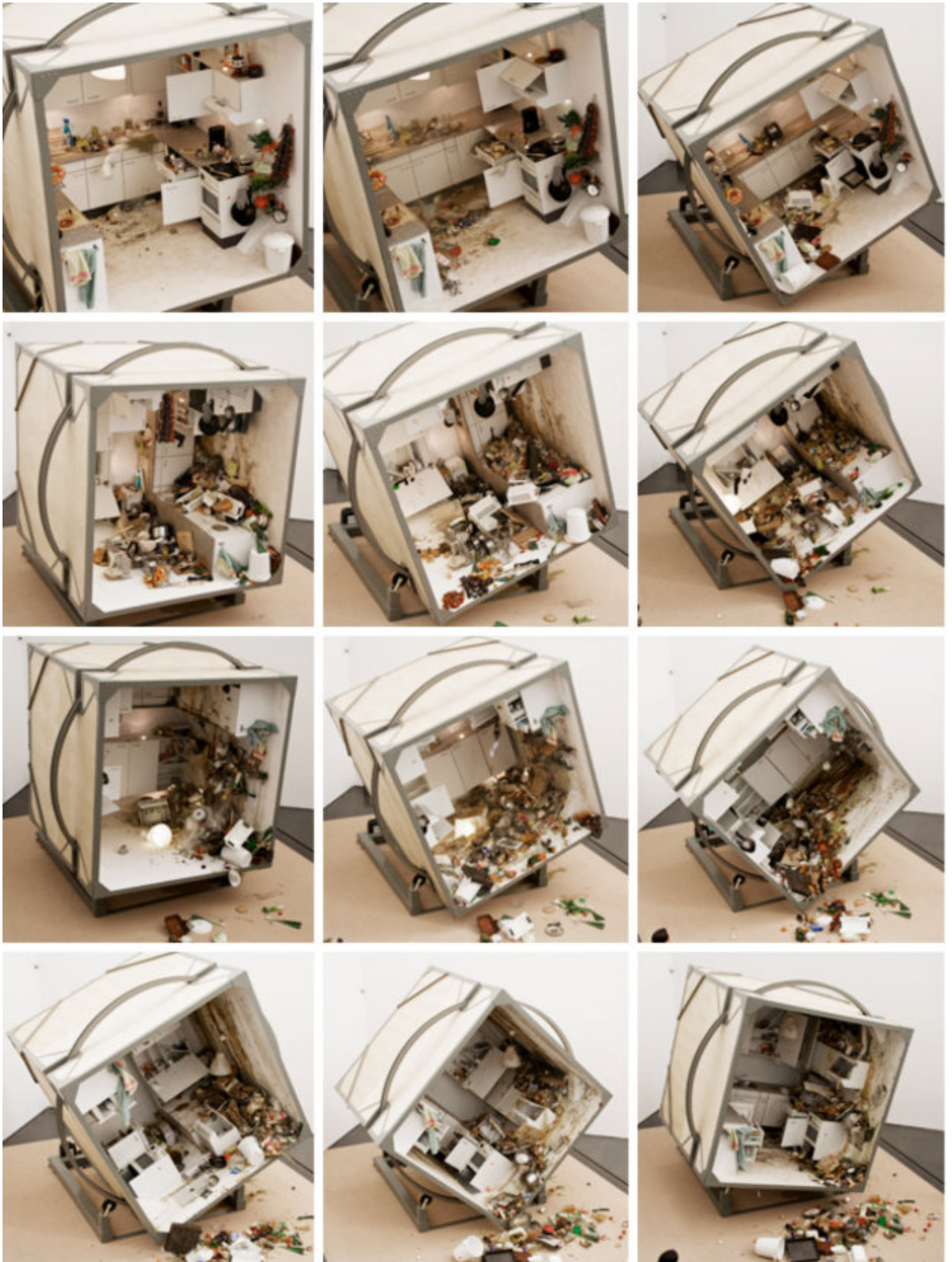


Fig. 6: A graph showing extrapolated data from 'The Olfactory Reading List - 2023 - 2024' (Appendix 5). The x-axis shows the era of publication, the y-axis the number of publications in the document



Stephanie Weismann, for example, whose research focuses on Lublin in the 1930s, notes the resemblance between the discussions people had about scent in that era and the ones we are hearing now. Combined with collective smell experiences and personal smell stories, scent tells us about the way people are sensing and making sense of their environment. Melanie Kiechle sees scent as a direct way into one of the questions that are fundamental to her research: "What was it like to live in that place, at that time?" Anna Chen addresses scent as an archival tool, stating that scent can enrich archival theory and practice, by preserving and providing a new way of gaining access to the past.

Hsuan Hsu takes a different approach, focusing on scent as an invisible medium exposing environmental inequity, coming into the topic of olfaction through an interest in atmospheric disparities, as our sense of smell is inseparable from breathing. He argues that research into heritage smells should be guided by efforts to redress power structures that have been sustained by olfactory stigma. Xuelei Huang echoes this, by arguing that the study of largely universally comprehensible smells enables us to envision a truly global history "- or rather human history across artificial boundaries". All and all, 'Smell, History and Heritage' offers a broad and enthusing outlook on the use of scent as a new route into heritage.

Changing outlooks on olfaction are echoed in the philosophical discourse surrounding the topic. Olfactory experiences have long been a subject of philosophical inquiry, with scholars exploring the nature of our perception of smells and the external entities represented in olfactory experiences, but like the discourse presented in 'Smell, History and Heritage', we find representations of olfaction within a wide range of philosophical conversations.

In "Theoretical Perspectives on Smell," (Keller, Young, 2023), a comprehensive overview of the current debates surrounding the philosophy of olfaction is presented. The book highlights the emergence of olfactory philosophy as a distinct field within philosophy, and is organised into four main subject areas: the importance and beauty of smell, smell in time and space, what we perceive through smell, and smell and the other senses.

According to *Keller and Young*, historically, four primary philosophical frameworks have emerged in this discourse: The Aristotelian view of olfactory experiences emphasises the uniqueness of the sense of smell, while Reid's theory of secondary qualities suggests that smells are mind-dependent and mediated by our cognitive processes. Similarly, Perkins' approach argues for an indirect realist account of smell, where the sensible character of an odor is attributed to the object. (*Perkins, 1983*) Lycan's work on the philosophy of smell highlights the importance of studying smell as a distinct perceptual experience that challenge dogmatic positions in philosophy of mind and perception. (*Lycan, 2020*)

Olfactory philosophy is a diverse field that can be approached from various perspectives, each offering unique insights and raising different questions. Investigating the part-structure of odors can help us better understand the nature of olfactory experiences and how they differ from other perceptual experiences. Another framework applicable to olfaction is phenomenology, which examines scent as a conscious, subjective experience and explores how it shapes our understanding of the world.

Olfaction also has a place in the philosophy of perception and the philosophy of the senses, which examine what we perceive when we smell something and how olfactory perception differs from other perceptual modes. The nature of beauty and art is also relevant to olfaction, as it determines how we should value scent in the realm of art and on what criteria we should base our aesthetic judgments.

Phenomenology examines scent as a conscious, subjective experience and explores how it shapes our understanding of the world. Aesthetic formalism focuses on the formal qualities of olfactory art, while cognitive science investigates how smells are processed by the brain and how they influence emotions, memory, and communication. Deroy's metacognitive account argues for a celebration of scent's abstraction, offering practical handles for the use of olfaction by addressing the learning of general knowledge at a younger age. (Deroy, 2022)

Representationalism questions the nature of external entities represented in olfactory experiences and debates whether odors can be experienced as objects (Batty, 2009-2011), while mereology (Skrzypulec - 2019) examines the study of parts and wholes in olfactory experiences. Batty proposes a moderate representational view that honours the phenomenology of olfactory experiences while maintaining their world-directedness. Barwich argues in favour of reductionism towards olfaction to understand the mechanisms of olfactory perception, while embodied cognition articulates the role of the body in shaping our perception of the world. (Barwich, 2021)

For the purposes of olfactory art, a less labyrinthian structure is warranted, as we are not interested in theory per se, but in a framework that allows us to apply scent to practical context in a reasoned way. This makes constructivism a tempting framework, even though (or perhaps because) it is not the most clearly defined philosophical framework. (Kukla, 2000)

Many scholars and researchers throughout history have advocated for the active engagement of students in the teaching and learning processes. Renowned proponents of this approach include Bruner, Piaget, Vygotsky, and Dewey, who are recognized as the leading figures of the constructivism philosophical paradigm in academia (Honebein, 1996)

What makes constructivism such a tempting approach is that we are rarely interested in theory per se, when it comes to the application of scent. Rather, we are interested in the active role of the perceiver in constructing their reality, the concept of co-creation between artist and audience and the importance of context in the way we view the world (Adom, Yeboah, Ankras - 2016). This means that constructivism allows for theory from all other areas to become part of new, experience-based knowledge, which is a very good fit for the study of olfaction in application across various fields.

What we need to understand in using scent as a medium for design is that the experience of smelling a particular scent is not solely determined by the chemical properties of the odorant, but also by the individual's prior experiences, expectations, and cultural background. (Herz, 2011). Furthermore, in understanding olfactory art, it is crucial to move away from a strictly scientific or empirical approach, embrace the broad scope of the subject and allow room for the subjective and personal nature of both olfactory experiences and art, allowing learning to be done in practice (Kalender, 2007).

SMELL PIECE FOR YOKO #3

Smell your favourite smell

Write a letter to it



SMOKE CLOUD - PETER DE CUPERE - 2014

In the light of Hsuan L. Hsu in:

"Olfactory Art, Transcorporeality and the Museum Environment

Smoke Cloud is an installation by Peter de Cupere that immerses visitors in the materiality of air by presenting a visual and olfactory experience that disrupts the traditional order of the gallery space. Visitors ascend a ladder to inhale the scent of air pollution, which refers to Havana's poor air quality and its Cold War origins and trade embargoes.

The installation has been presented on several occasions, each time carrying the scent of the air pollutions in the city it was displayed in. By introducing the scent of smog, the artwork aims to create a dialogue between the visual and olfactory senses, highlighting the impact of air pollution on human health and the environment.

We can view this work as Hsuan Hsu's "Smell of Risk" personified (*Hsu, 2020*) - Hsu explores the trans-corporeal dimensions of toposmia, a term coined by Drobnick (*Drobnick, 2006*) to describe a new field of inquiry concerned with the spatial location of odours and their relation to notions of place. Hsu's work draws attention to these environmental disparities, stating that we live in a world of differentiated atmospheres and unevenly distributed environmental risks.

SMELL MEMORY KIT 2.0 - SISSEL TOLAAS - 2014

Reflected upon by Cecilia Bembribe in:

"The Smells and Senses of Antiquity in the Modern Imagination" (Grand-Clément, A., Ribeyrol, C., Bembribe, C. - 2021)

Supersense, a brand established by scent artist Tolaas, has developed a 'Smell Memory Kit' (SMK), which consists of an abstract fragrance worn as a necklace. The SMK is designed to trigger memories through scent association. The user links the abstract scent with a specific memory that they can recall in the future by breaking a vial of the fragrance. This concept of scent-triggered memories is also explored by artist Andy Warhol, who collected perfumes to create a personal library of smells associated with specific memories. Primo Levi's short story 'The Mnemogogues' and Patrick Süskind's novel 'Das Parfum' further explore the idea of preserving scents as memories, as Bembribe states.

The SMK is an example of the Proust-effect, which is often improperly applied. While scents can evoke memories, they function as time portals that must be installed before one can travel to them. One might find an organically formed portal, such as Proust's madeleine. However, it is also possible to deliberately install these 'olfactory time portals' by rotating scented products regularly, or by using Tolaas's SMK.

Where the fallacy often occurs is in the fact that the Proust-effect is often claimed, while it is not appropriate. While a scent in the context of heritage might be connected to someone's memory, we cannot experience the reliving of that memory ourselves - as this connection is personal. What we experience instead is Huizinga's 'historical sensation', the feeling of being deeply connected to history - (Verbeek, 2021)



FAMOUS DEATHS - SENSE OF SMELL

FAMOUS DEATHS is an installation that aims to recreate the final moments of four famous people using scent and sound. The installation removes visual cues and immerses visitors in the scents of their surroundings to create an intense and unforgettable experience. One of the scents featured in the installation is that of J.F. Kennedy's assassination, consisting of the scent of blood, brains, and gunpowder in the car.

During a 2021 IDFA-interview (*Sense of Smell, 2021*), van Brakel en Meeuwenoord describe the installation as a type of 'analogue VR': smell and sound vividly evoke a situation that the brain then fills in further. While the experience was multi-sensory, participants also described feeling heat, during the explosion, even though the installation did not change in temperature. This implies that our senses and the experience we derive from them, is indeed more complex than a hierarchical system of senses allows for.



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APPENDIX

Appendix 1

Olfactory Artwork: a Visual Guide in References

Appendix 2

Case Study - Scent in 17-th Century Dutch Painting: A case study of the Olfactory Exhibition "Fleeting; Scents in Colour" - Het Mauritshuis

Appendix 3

Working in Scent: A Personal Account of Working with Scent in Context

Appendix 4

Literature Review - 2022 Advanced Undergraduate Diploma Research Theory and Practice - Michaelmas

Appendix 5

An Olfactory Reading List : 2023-2024

SET THE SCENE WHAFT EVAPORATE
BANES' TAXONOMY
EXPERIENCE
CROSS-MODAL PROXIMITY
PERSONAL
MULTI-SENSORY
SCENT
MEMORIES
AIR LANGUAGE
SUBJECTIVE
PROUSTIAN
IMMATERIAL
PERSPECTIVE
PERCEPTION
DEODORISATION
SENSORY
FLEETING
IDENTITY
EMOTIONAL LAYER
MOLECULES
CONSTRUCTIVIST
INTER-DISCIPLINARY
OLFACTORY
AND.....
BREATH
HERITAGE
"LOWER" SENSES
BULBUS OLFACTORIUS
NEURO-ANATOMY
SENSORY TURN
OBJECTIVE
ANCIENT
#SMELL
THE GREAT STINK
INTIMACY

Appendix 1

OLFACTORY ARTWORK

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P. 13



P. 14



P. 15



P. 16



P. 17



P. 18



P. 19



P. 20



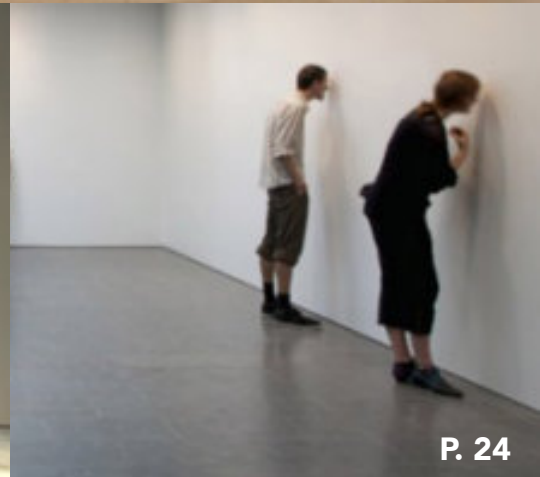
P. 21



P. 22



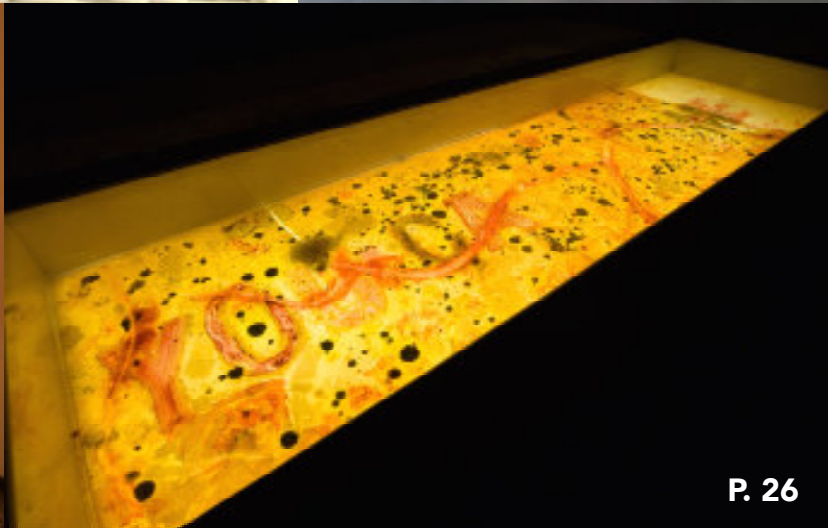
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P. 33



P. 34



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Appendix 1

SECRECTIONS MAGNIFIQUES

ETAT LIBRE D'ORANGE



True olfactory coitus, "Magnificent Secretions" takes us to the summit of jouissance, this ever-new moment when desire triumphs over reason. The masculine tension, all in acute notes, releases its adrenaline discharge in a cascade of aldehydes. The freshness effect is striking. Then the perfume reveals its metallic side, precise, sharp as an unfulfilled desire. We are on the edge of the razor ... The sweaty skins have the flavor of musk and sandalwood. The marine effect, slightly salty, excites the taste buds and puts the water in the mouth. Languages and sexes are found, pleasure explodes, and everything changes. Mechanics of the fluids, confusion of the kinds. This subversive, disturbing scent provokes full adhesion or rejection. The love games are rarely satisfied half measures ... Between Don Juan and the woman offered, it is the deposit of weapons, but who bows before whom?

It is claimed, I would not assure it, but some scholars persuade us that the chestnut blossom has the same positive odor as that prolific seed which it pleased nature to place in the kidneys of man for the reproduction of his similar. A young lady of about fifteen, who had never left her father's house, was walking one day with her mother and a pretty abbe in a chestnut-tree alley whose exhalation of flowers perfumed the air in the suspicious direction. that we have just taken the liberty of enunciating

- Oh my God, mother, the singular smell, said the young person to his mother, not noticing where she came from ... but feel, mom ... it's an odor that I know.

"Hold your tongue, miss, do not say such things, I beg you.

"Why, then, mamma, I do not see any harm in telling you that this odor is not foreign to me, and it certainly is not.

- But, miss ...

"But, mamma, I know her, I tell you; Monsieur l'Abbe, tell me, I beg you, what harm I do to assure Mother that I know that odor.

"Mademoiselle," said the abbe, pinching his crop and fluttering the sound of his voice, "it is quite certain that evil itself is a small thing; but it is that we are here under chestnut trees, and that we naturalists, we admit in botany that the chestnut flower ...

- Well, the chestnut blossom?

- Well, miss, it feels like the f ...

MAIN NOTES

Iodized accord (fucus, azurone), adrenaline accord, blood agreement, milk agreement, iris, coconut, sandalwood, opoponax



**Appendix 2
Case Study**

**SCENT IN 17-TH
CENTURY DUTCH
PAINTING**

**A CASE STUDY OF THE
OLFACTORY EXHIBITION
'FLEETING - SCENT IN COLOUR'
- HET MAURITSHUIS - 2021**

Roses in a Glass Vase - Jacob van Hulsdonck - c. 1640. Copper, 35 x 28,4 cm. Mauritshuis, The Hague



SCENTS IN 17-TH CENTURY DUTCH PAINTING:

A case study of the Olfactory Exhibition "Fleeting; Scents in Colour" - Het Mauritshuis

Renske T. van Vroonhoven - 2023

This case study is written as a non-graded assignment during the EdX course "Cultural Heritage in Transformation" by RWTH Aachen University.

The course consists of an introduction into the World Heritage System and several case-studies from the larger Aachen-area, showcasing material and immaterial heritage. Part of the course is this three-step case study.

As a perfumer, researcher, teacher and artist, my field of expertise is the realm of olfaction. As my subject I decided to look at the way the recent exhibition "Fleeting: Scents in Colour" uses scent as part of presenting a collection of formal, material heritage. I will briefly touch upon the status of smell itself, as it is one of my core research questions. This paper is relevant to the conceptual framework of this assignment, as it highlights the decisions that need to be made, when applying smell from the context to heritage to the practical setting of exhibition design. It also highlights several ways of theorizing about smell from a heritage perspective and shows how smell is emancipating as a way into heritage theory and exhibition design.

On the right: Jan Saenredam after Hendrick Goltzius - "Smell" c.1595 - Engraving, 180 x 240 mm., Rijksmuseum, Amsterdam



3. *Quamvis floriferus sit gratus naribus hortus,
Sepe tamen dulci fel sub odore latet.*

STEP 1

"Please upload a 2-to-3-page document (page size: A4 | font: Calibri | font size: 11 | file format: PDF) including the following information:

Describe your case study site in general. Then focus upon its cultural heritage: On the basis of what properties is your case (to be) considered as cultural heritage? Is here locally and/or internationally designated cultural heritage at stake? Distinguish between tangible and intangible heritage elements if applicable. What is the legal basis for these and who are the important players in defining them?"

Introduction

The sense of smell has played a vital role in the way humans interact with their environment, and as such, it has become an essential aspect of cultural heritage. One way of exploring the significance of smell in cultural heritage is through art and exhibitions. In this essay, we will examine the exhibition "Fleeting - Scents in Colour" held at the Mauritshuis from February to August 2021. The exhibition featured artworks from the 17th century that are connected to the sense of smell, allowing visitors to experience the Netherlands in the 17th century through their noses. The exhibition was a prime example of how smells can be used to convey emotions, memories and historical contexts. This essay will explore the role of smell in cultural heritage, the neurological dynamic of olfaction and memory, the cultural interpretation of smell, and the heritage implications of smells.

The Neurological Dynamic of Olfaction and Memory

The sense of smell is unique in the way it affects our perception and memory. The olfactory system is a complex system of receptors located in the olfactory epithelium, which sends signals to the olfactory bulb and eventually the brain's amygdala and hippocampus. These parts of the brain are associated with emotions and memory, respectively. When an odorous molecule enters the nasal cavity, it comes into contact with the olfactory epithelium, triggering a signal that activates the neural pathway to the brain. This direct neural connection between the olfactory system and memory circuits explains why smells can trigger vivid memories. (Barwich, 2020).

The Proust Effect is a term used to describe the vividness with which involuntary memories can strike us through smell. The effect is named after a scene in Marcel Proust's novel, "À la recherche du temps perdu," in which the protagonist bites into a madeleine dipped in herbal tea and is transported back to his childhood. This effect demonstrates the powerful connection between smells, emotions, and memories.

However, the impact a smell has on our memory is largely cultural. Our interpretation of a smell is shaped by our cultural and personal experiences. For example, the smell of lavender can evoke memories of different places depending on a person's cultural background. For a Frenchman, it may evoke memories of the Provence, while an Englishman may associate it with Mitcham. This means that we are not only observing the smell but also our own reactions to the smell.

Fleeting; Scent in Colour - the Olfactory Dimension of Dutch 17th Century Art

In the exhibition, visitors are invited to look at the Netherlands in the 17th century through their noses, instead merely their eyes. The exhibition features objects and paintings from the 17th century, that all, in one way or another, are connected to the sense of smell. In some cases this means that scents are suggested in the subjects of a painting, be that a pile of manure, covered in flies, next to a cow, or the Bleaching Grounds, by Jacob van Ruisdael. (Ruisdael, 1670 - 1675).

Each of the pieces on display is marked as cultural heritage in itself, as the Mauritshuis states: "Even though scent is the subject of the exhibition and there will be all kinds of smells to enjoy, it is the artworks above all that carry the story." In this case, there is an interesting juxtaposition between the tangible heritage (the objects and paintings on display) and the immaterial heritage (the smell associated with them).

In considering this dynamic, we must note a few important factors:

- 1) This involuntary memory only works one way: we can not travel back to a smell we have not smelled before. When we smell a scent for the first time this situation determines how we will, in the future, recall the smell. (Dylan, Verbeek, Cohen, 2021). This means that we can not use smell as a trigger for memories we do not have ourselves. If we look at a painting of workers in a field, and we smell wet soil, the combined association might leave a deeper impression of toiling on the land, but the smell itself might just remind us of relaxing chores in our garden on a Sunday.

- 1) The impact a smell has on us is largely cultural. In her PhD-thesis "Ruiken aan de Tijd" (Verbeek, 2020), Caro Verbeek gives the example of lavender. It was used by the Futurists to conjure up associations with Liguria - a region in Italy, known for growing lavender. If you would ask a Frenchman what this smell reminds him of, he will undoubtedly say it's the Provence. An Englishman from the 19th century, however, would probably say it is most reminiscent of Mitcham. So while the smell itself will not change, the way we interpret smell will. If we smell a scent, we thus must ask ourselves: "Are we observing the smell, or are we observing our own reactions to the smell"?

- 2) Smell has no floor-ground segregation. This means that we are not able to distinguish different odiferous objects as separately as we would do when we would see them. When we look at an apple on a table, we are able to clearly distinguish the two, and see where the apple starts and the table ends. In the case of smell, this means that it is very hard to determine which part of a smell would qualify as "the smell of a scene".

In terms of heritage these factors have a few interesting implications that we need to consider, should we want to classify smells themselves as part of heritage. As Roy Porter states in his foreword to Mark Bradley's "The Senses in Antiquity: Smell and the Ancient Senses": "Today's history comes deodorised". (Bradley, 2013)

To illustrate this statement with an example from Antiquity, we may look at the Roman bathhouses. When we view them now, we see large, empty, white buildings. What we imagine going on inside mainly has to do with hygiene, and might look a bit like an Alma-Tadema painting - beautiful, classicist and clean. The reality of a Roman bathhouse was strikingly different. To imagine the smell we must keep in mind that hundreds of sweaty Romans would gather there, huddled together in baths of bracken water that might not have been changed for days.

These tubs were occupied by 8 to 12 Roman bathers at the same time, that might be suffering from open wounds, lesions, lice, gangrene, worms, diarrhea, gonorrhea, tuberculosis, or worse. After being occupied for the entire, often hot, afternoon, the bathwater would be more than pungent. (Ann Olga Koloski-Ostrow, 2015, p.104)

The Roman medic, Celsus (30B - Book V 26.28) warns against bathing in this dirty water: "Bathing, too, while the wound is not yet clean, is one of the worst things to do for this makes the wound both wet and dirty, and then there is a tendency for gangrene to occur." All of these smells would fill the air, and upon walking into a bathhouse the scent would supply us with a lot (maybe even a bit too much) information.

In this light, the first question raised by the points above is "Why would we consider smells as heritage?" If a smell is just a bunch of fleeting molecules that trigger individual minds, what kind of information is there to be found in scents?

Primary and Secondary Information

Simply stated, a smell tells us a lot about our surroundings. Even the most luxurious of rooms becomes unbearable when there is a rotting possum hidden in the corner. Smell, thus, contains important information about our surroundings and in the cases of the paintings on display in this exhibition: we may argue that the painter didn't choose the subject of smell as a coincidence - they wanted to draw attention to the subject, sometimes very specifically.

Besides this direct olfactory information, we can distinguish indirect information, that tells us something about how the scent was perceived in the time it was originally smelled. We may wonder if the maids in de Hooch's painting enjoyed the 'fresh air' from the opened windows, or if the scent would have disturbed them? Maybe there were 'good' and 'bad' days, in terms of the canal's smell?

The second consideration presented in the catalogue is one that poses several challenges, namely: If the way we perceive smell is so personal, then how do we share that information? If we want to reference the hard work on a potato-field, but our visitors end up being reminded of some leisurely gardening, we didn't communicate clearly what we wanted to say. Thus supplying olfactory heritage with the proper context becomes vital.

The idea that a work of art will speak for itself is, in this case (as it is in most cases), untrue. If we look at Pieter de Hooch's "At the Linen Closet" (De Hooch, 1663) we might guess that the linen has a smell. Unless we would look into the way linen was washed in the 17th century, though, we would be none the wiser. The open door in the background leads to a canal, another source of smell - the Dutch canals in the 17th century were famous for the stench they exuded. While all of this information can be suspected from our primary source, we will need secondary sources to establish the olfactory landscape depicted in the Painting.

Floor Ground Segregation and the Olfactory Entity

The last point we addressed was the lack of floor-ground segregation. Here I see one of the biggest problems for smell as immaterial heritage. To understand how that works we can look at the phenomenology of smell in our personal lives. I will take my grandmother's house as an example. This house from the 1930's had housed the family for many decades. Now my grandmother lived here by herself. When my grandfather died, their house no longer smelled the same. He was an avid smoker of cigars, a reader of old heavy books, and a drinker of "jenever". When his cigar-smoke faded, the house gained a new olfactory entity.

My grandmother was a bit more refined in her olfactory preferences: she wore "Rive Gauche" by Yves Saint Laurent, and cooked a wide variety of classical dishes - one of her most popular was a vegetable soup with bone marrow. All of these factors contributed to an olfactory entity that was "her house". But if we were to reconstruct that, would we pick a day when she was making soup? Or a day she wore an extra spray of her signature perfume? While the olfactory landscape changed with each day, the olfactory entity remained the same in my perception.

But what does that imply? If we equate the smell of her house with vegetable soup and Rive Gauche but neglect the old carpet, the slightly rickety plumbing and the old toolshed, wouldn't that be like reconstructing an orchestra by only protecting the violin section?

In the case of this exhibition, reconstructions are being made, but they are always accompanied by context. We see the painting itself and are given an explanation of where to place the scent. As working with scent is a fairly new practice in a museum-and heritage context, this stage seems satisfactory. We are not protecting the smell as heritage, but we are using scents to give new and extra information to existing heritage. This counteracts most of the problems we described, because the smell now relates to an object with a more solid, legal heritage framework - just like the sign next to it, explaining the history of a painting, would.

STEP 2:

How would you define the non-economic values of the cultural heritage in your studied case (e.g. historical, artistic, architectonic, urbanistic, social, scientific, ethnological)?

Why do you think it is important to preserve these values?

Are there heritage features in your case study area which have been neglected so far?

Why do you suggest that these features should also be acknowledged as cultural heritage? What would be your key questions while exploring this neglected heritage and which methods would you use?

Introduction

Since the sensory turn, (Nieuwhof, 2016) a new appreciation for the power of scent has emerged, offering unique insights into our history and heritage. In this essay, we will explore the reasons for scent's neglect and its newfound significance, specifically through an examination of three paintings in an exhibition that use scent to create a more realistic experience of the past. By looking at these paintings and their olfactory elements, we can better understand how scent can connect us to our past and illuminate the cultural and social contexts of different historical periods.

Smell - the neglected sense

Scent is often described as a neglected sense. This has several causes:

- 1) Culturally we have grown apart from our sense of smell due to the hierarchy of the senses, established by Plato, and later expanded upon by Immanuel Kant. The miasma theory also played its part, stating that smells were the main cause of illness, instead of, as we know now, merely coinciding with the growth of bacteria. This led to a mostly negative view of smells. Even later Sigmund Freud (1856 - 1939) (Verbeek, 2021), who was himself an anosmic or 'aroma blind' due to his frequent cocaine use, stated that we no longer really need our nose, and have largely lost our ability to smell due to evolution. All of these theories have been disproven, giving way to a new appreciation of our olfactory sense.
- 2) We don't have a firm vocabulary for smells. Instead, we rely mostly on borrowing language from other senses (Verbeek). With language, comes attention for a subject. That which we can not speak about, does not become part of conscious heritage or culture. Instead, smells have remained largely unconscious experience. This does not mean they are not of value and that they do not contain information.
- 3) Our perception of scent is highly personal. The information it gives us is often linked to a myriad of other factors, such as what we saw, felt, tasted and heard during our encounters with the scent in question. The personal nature of these olfactory impressions might seem like it disqualifies our olfactory sense as a medium for conducting objective history, but I argue that, in fact, it allows us to better understand human experience of the time.

Through exploring the sense of smell, though, we are able to look at our history and heritage in a new way:



Emanuel de Witte - The New Fish Market in Amsterdam. C.1672. Canas, 52 x 62 cm. Rijksmuseum, Amsterdam.

This painting depicts a fragrant scene - the fish in the foreground take center stage - some of the fish guts even spilling out. The scene is not meant to evoke disgust, but rather a sense of opulence. The fish stall is stocked with fine fish, like cod, salmon, thornback, ray, sturgeon, and turbot (Fleeting, Scents in Colour, 2021) The fish-wife offers a piece of fish to one of her customers for inspection - as none of the people depicted in the scene show any sign of experiencing a disagreeable odour, the fish must have been quite fresh.

- Scent establishes a feeling of closeness and reality. For us to smell a scent, that smell must be near us. This means that if we smell a rose, there needs to be something nearby giving off a smell with the same chemical profile as a rose. This doesn't mean that it has to be an actual rose, it may also be a perfume, or perhaps a single molecule that reminds us of a rose (like phenyl ethyl alcohol).
- Scent allows us to perceive a scene more realistically. Just like we now think of sculptures from Antiquity as white, marble works of art, beautiful in their minimalist pureness, we must not forget that in reality these statues were painted in bright hues. Just like that the Roman bathhouse didn't smell like a modern Spa, but more like sewage, stale water and sweat.

Verbeek states, in the publication related to the publication:

"Looking at artworks and stories with an 'olfactory gaze' and actually stimulating the nose can bring to light inconspicuous or even invisible elements, such as the aromatic contents of pomanders. Smells can connect us directly with a distant past and at the same time summon up very personal memories. "

Now that we've looked at ways the sense of smell can inform us, it is time to look at some examples from the exhibition. I have selected three paintings and will explain how their olfactory elements are presented.

"Until the 19th century, it was common to dump excrements and dirt into the canals via gutters. As a result, the canals in Amsterdam served as open sewers (Werkman, 1982) and water quality in the canals was very poor. As early as 1481, there were complaints in the city about the dirt and the stench. Despite the availability of partitions under the bridges, the situation did not improve. Owing to the open sewage system, diseases spread quickly and the odour nuisance was omnipresent. The canals were flushed by the tidal flows that flushed the sewage out of the city." (Peters, S., Ouboter, M., Van der Lugt, K., Koop, S., Van Leeuwen, K., - 2020)

In the exhibition space, this work was accompanied by two smells - the smell of clean laundry, and the smell of the dirty canal-water - that the people of the time would have known so well. It is interesting to note that there are two main perceptual differences between us and the subjects of the painting -

- 1) We will encounter the smell in a gallery space - meaning we will smell it out of the context of a 17th century canal.
- 2) We will not recognize it as the smell of a canal.



Pieter de Hooch, Interior with Women in Front of a Linen Cupboard, 1663, Canvas, 70 x 75.5 cm. Rijksmuseum, Amsterdam.

We see a scene from a spotlessly clean house, the floors gleaming, and two women standing in front of a linen closet. They are either taking out the clean linens, or perhaps storing them back in their appropriate place. The way the crisp, white sheets are folded, conjures a mental smell of cleanliness.

This wholesome household scene is complemented by the doors and windows of the house being open, giving the painting a summery feeling. We see the door opening up to the beautiful old canal. We can almost feel the breeze in our faces: but wait!

The breeze that would hit our faces, would not have supplied us with a summery whiff of Dutch tulips, on the contrary. The canals in Amsterdam had a notoriously bad smell during the 17th Century..

To illustrate the effect these differences will have on the perception of a smell, my mind wanders to the Achterhoek, a beautiful, rural area in the Netherlands, that - on a good day - can smell of the manure that is used to fertilize the land. It is a smell that would smell quite shocking in a gallery space, but that I am intimately familiar with. When I smell it, I think of springtime in the countryside and of my youth, riding horses, and for that reason, I enjoy the smell. That suggest that the hedonic profile of a smell is partly determined by the association we have with it. If the subjects of the painting would really have minded the smell, would they not have closed the door? I believe that the smell of the canals, while unpleasant, became nothing more but a fact of life to the people living next to them.

This ties in nicely to the second example I will discuss: Jacob van Ruisdael's "View of Haarlem with Bleaching Grounds" from c. 1670. Van Ruisdael painted several views of the city of Haarlem "where the green meadows are striped with lucid white linens. The fields that were used to turn textiles bright white were famed for being picturesque, and the thriving market for Ruisaels's 'Haerlempjes' (views of Haarlem) may reflect this" (Marx, 2021)

In real life, these views, of white textile on green grass, were accompanied by a strong scent: "Part of the bleaching process involved soaking the textiles in sour buttermilk and rank-smelling lye (boiled ash). When he textiles were stretched out in the fields, the stench could not have gone unnoticed. The serenity of Ruisdael's scene conflicts with the apparent foul reality of the bleaching industry. When contemporary viewers saw Ruisdael's scene, did they recall that particular stench? If the atmosphere was tainted, perhaps it was the very lack of this distinct odour that made the painted landscape more pleasant than reality."

In this case, even the perspective distances us from the smelly event, but it is painted. One would argue that if the painter really wanted to paint a scene he found picturesque, without any notion to the smell, he would have simply painted the view on a day that the bleaching grounds were unused. What could have been his motivation to paint the stinky linen? Did he not mind the smell? Did he like the visual impression so much that he did not consider the scent? Or did he want to create a sense of contrast, by painting a view of the city, in the green fields, with this chemical process? While we might not have answers to these questions, they are worth asking - they give us insight in to the way our ancestors experienced the world.

The final work we will look at is Michiel and Pieter van Mierevelt's "The Anatomy Lesson of Dr. Willem van der Meer" from 1617. This painting displays quite a large contrast - on the one hand we have a group of men, dressed in fine clothing and blushing with life. On the other hand we see the body of a man, being dissected. We can tell by the hand resting on his lower abdomen, and the cloth over his eyes, that he is dead. As there were no ways to freeze the body in the 17th century, we can imagine that this method of learning about human anatomy must have had a smell to it.

As the smell of a dead human is one of the only scents human being universally find unsettling, we can see that the men attending this anatomy lessons occupy a myriad of ways to counteract the smell. The second man on the left, in the foreground of the painting is holding a stick of burning incense, next to a small, smoking stove, that is also smoking with incense. The men on the right are holding different olfactory attributes: a branch of laurel, sprigs of aromatic herbs, and to the top, a pomander (or pomme d'ambre), an olfactory attribute that would hold sweet smelling substances, like exotic resins or ambergris.



*Jacob van Ruisdael - "View of Haarlem with Bleaching Grounds" - c.1670 - 1675.
Canvas - 55,5 x 62 cm. Maurtishuis - The Hague*



Michiel en Pieter van Mierevelt, 1617, The Anatomy Lesson of Dr. Willem van der Meer, Canvas, 144 x 198 cm. Museum Prinsenhof, Delft

Warding of the smell did not only create an environment that was more conducive to learning, it also showed the status of the men attending the lesson. A pomander was quite a costly possession, meaning that in this case, it emphasizes the status of the man holding it. The most important reason for these scented attributes, however, was a matter of safety. This scene is painted before the human kind discovered the existence of bacteria. At the time, the most prominent theory for the spread of diseases was the so-called miasma-theory, that stated that foul scents were capable to enter the body, through our nose, and our porous skin, making us sick. Of course, now we know that the smell is not the thing itself that makes us sick, but it does coincide with the spread of the bacteria that do.



Jan Miense Molenaer, Smell, c. 1673, Panel, 19,5 x 24,3, Mauritshuis, The Hague.

Far removed from the neutral expressions of the subjects of the 'The New Fish Market in Amsterdam' we clearly see a reaction to the scent on the face of the man sitting at the table. While the woman wipes the bottom of the child on her lap, he turns away in disgust, pinching his nose to keep out the smell. The man in the background seems to find the whole scene rather amusing, and the expression on the woman's face suggests that she is quite untouched by the smell - she must have gotten used to it over time.

STEP 3:

Please upload a 2-to-3-page document (page size: A4 | font: Calibri | font size: 11 | file format: PDF) including the following information:

Describe how the cultural heritage in your studied case is conserved, utilized and managed in general. Then elaborate on a common or outstanding approach within these measures and evaluate its achievements and shortcomings, clarifying the links to planning and design activities as well as to city/regional development.

The conservation of smells is quite a challenge, because of the nature of scents. They are fleeting, and lack floor-ground segregation - which means that it is very hard to retroactively determine the smell of a scene. Of course, there are several ways we can find out how a situation from the past might have smelled:

1. Reports of nose-witnesses: in some cases, there are written descriptions from people that witnessed an event. Verbeek (2021) describes how Andy Warhol was obsessed with preserving odours, as the sense of smell is in more direct contact to our memories than any other smell: "To his great regret, his favorite smell - which could be inhaled in the lobby of the Paramount Theatre in New York - disappeared forever when the theatre was dismantled. While he could describe the smell, he was not able to recreate it.

This summarizes the challenge nose-witness reports pose: as we do not have much olfactory language. On one hand, the reports we have are almost always brief and offer us descriptions about a lot of things, except the actual smell. A smell is often described as 'strong', 'sweet' or 'sickly' - telling us that the scent stood out to the perceiver, but we rarely encounter scent-descriptions that offer more handles for reconstruction. On the other hand, the 'smell of the Paramount Theatre in the 1970's' was an olfactory entity to its contemporaries. It was not just the smell itself that was touching to Andy Warhol, it was the memories and feelings it triggered. Even if we were able to reconstruct the smell, molecule for molecule, it would not evoke the sense of the ultimate night out in us, the way it would in Andy Warhol.

2. Smelling residue in artifacts: While still not a common practice, there are cases of researchers entering collection nose first, like Caro Verbeek. They aren't interested in the layers of paint or the bricks used, but in the smells that still remain in certain old artifacts. Pomanders, incense burners, perfume bottles or old cabinets: all are able to hold historic smells to a certain degree. This research is not only conducted by people, but also by machines. A GCMS (Gas Chromatography Mass Spectrometer) can be used to measure volatile components, and thus create a sensory profile of a certain scent. In some cases, though, the human nose is better at this job than a machine is. When smelling a pomander from the collection of the Rijksmuseum, the professional 'noses' exploring the collection were able to sniff out a specific type of resin, Elemi, where the gas chromatograph merely indicated 'some kind of resin'. (Verbeek, 2021)

3. Reconstructing olfactory experiences: We see a growing amount of olfactory reconstructions in the world of heritage. This process is done by gathering as much available information as possible. It is not merely the actual scents or descriptions of scents that are considered. We may look at paintings, that show us how people would use scents, like we see in "The Anatomy Lesson of Dr. Willem van der Meer".



CONSTANTIN

We may also consider the different processes in a painting that would have had scent as a byproduct, like we see in the "View of Haarlem with Bleaching Grounds". We can recreate the bleaching process used there, mixing lye and old buttermilk, and measure the aromatic components that emit from it. That profile can then be used as the "scent of bleaching", and can potentially be mixed with a composition that represents the green from the scenery.

In 'Interior with Women in Front of a Linen Cupboard' these different factors all come together. To get a sense of the full olfactory scene, there are many things we may consider: the perfume the ladies might be wearing, the scent of the canal, the soap they might have used to wash the linen, the polish they might have used to wax the floors.

When we consider olfactory heritage, the methods of conservation are two-fold: on the one hand we may try to conserve the actual smells from historical objects by creating optimal circumstances for the smell to remain intact. On the other hand we can create new pieces of heritage, by measuring the smell before it evaporates. This can be done through a gas chromatography and/or by allowing expert noses to smell objects and having them put their experiences in writing.

As all scents will eventually evaporate, it is important to establish olfactory profiles of historic scents now we have the technology to do so. This will lead to clear, chemical profiles that can later be reconstructed by combining the materials that show up on the gas chromatography. When a reconstruction of a scent is made, the formula used by the perfumer itself is something we can consider protecting. At this stage it is not merely the vial of fragrance that is protected, but the knowledge in how that scent is achieved, that becomes part of heritage.

A very special type of heritage occurs when this stage is reached during the life of our subjects of study. In "Fleeting: Scents in Colour" part of the exhibition is dedicated to the work of Constantijn Huygens, who described himself as: "a bit of a painter, a bit of a poet, a bit of a perfumer and a bit of a musician." in his introductory letter to Béatrix de Cusance, Duchess of Lorraine. (Huysman, 2021). "In addition to serving as secretary to the stadhouder, was an art connoisseur, poet, composer, musician, architect and scientist, and in all of these fields he maintained a large international network. It is a little-known fact, however, that he was also a fervent perfumer and in that field, too, he belonged to a circle of specialists and amateurs."

This means that in the fascinating legacy of Constantijn Huygens, we find expressions of many different kinds - among which many recipes for perfumed products. In the 19th century this written heritage got dispersed among different collections - and a section called "Medica et Physica, Chymica, Perfumata, Fusoria" can be found at the National Library.

This collection does not only include methods of preparation for perfumes as we know them today. "Mostly they are instructions for preparing perfumed products, such as balsams, powders, aromatic confectionery, scented sachets, aromatic balls for pomanders, perfumed bags and gloves". (Huysman, 2021).

He describes using many animal ingredients, such as civet, found in the anal gland of a civet cat, ambergris, which comes from the intestines of the sperm whale and musk, from the olfactory gland of the musk deer. He also uses many exotic florals, like orange blossom, roses, iris and jasmine and spices such as clove, cinnamon and nutmeg. Some ingredients are a little more exotic to us, but by referencing his and other manuscripts on the subjects we know that bezoar is a stone or concretion of undigested materials, often found in the stomachs of grazing animals, and that materials like bread, rice and earth were also used in olfactory preparations.

What makes this archive so special is that Constantijn Huygens created some very detailed writing. Not only did he specify exact quantities and descriptions of the materials he used, he was also well-connected. This meant that he sometimes exchanged recipes with other perfumers like Claude Courtan, a Paris perfumer and Jean-Baptiste Ferrein, perfumer to Queen Henrietta Maria of England. (Huysman, 2021). The formulae found in his collection, thus, were not just made by him, but were inspired by other people from his time - and thus, emblematic of the state of perfumery of the time.

Many of the ingredients Huygens used can still be found today, offering us a more than unique insight into what people in the 17th century might have smelled, and smelled like.

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Appendix 3

WORKING IN SCENT

**A PERSONAL ACCOUNT
OF WORKING WITH SCENT IN
CONTEXT**

MEMORY BAR

Memory Bar is one of the ongoing projects I have worked on over the last years - it has been nominated for and Art and Olfaction Award in 2022, and I have learned many practical lessons about working with scent in the context of heritage, memory and audience inclusion through it.

That means I consider it as part of my conceptual framework for working with scent: it clearly demonstrates how we should view each odor memory as an olfactory entity that is largely personal to the initial perceiver. It argues for a constructivist perspective towards working with scent in practical context.

Below you will find the submission for the 2022 Art and Olfaction Awards, which showcases the way a menu is constructed, and a short piece of background to the intention of the piece.

For the purpose of this conceptual framework I have described the role each sent has played in the courses of this menu.



BANES' TAXONOMY IN PRACTICE

As an olfactory artist, my main work consists of analyzing a situation and figuring out how to communicate in that situation, using scent. Often, a lot of decision-making is involved in this process. By peeling some of these decisions off, I am hoping to sharpen this olfactory decision-making, as it allows for a clearer view into what is going on.

Before I can start my analysis of the project, it is fruitful to establish what the project entails: Memory Bar is a multi-sensory experience design, that takes the shape of a cocktail-evening. Each menu item consists of a person's memory, translated into a relivable experience. The full menu and documentation thereof can be found below.

With the menu engaging all of the senses, we need to figure out what cues are best represented by which sense, or senses. We used memories from two main sources - written accounts and oral accounts that were collected during community interviews. In these accounts we are looking for sensory cues - sometimes a very clear one, like eating the tar from the roadside, sometimes less clearly defined, like the story taking place in a garden, in summer.

"There are two categories of historically informed scents: those based on research of historical artifacts, recipes, and artworks, and those based on a creative interpretation of the artwork, intended to provide a synesthetic translation of the object's formal qualities or highlight its olfactory characteristics, such as the scent of sandalwood for the statue of Shiva Nataraja, or the combination of fruits and cheeses in a still life." (Verbeek, Leemans, Fleming, 2022)

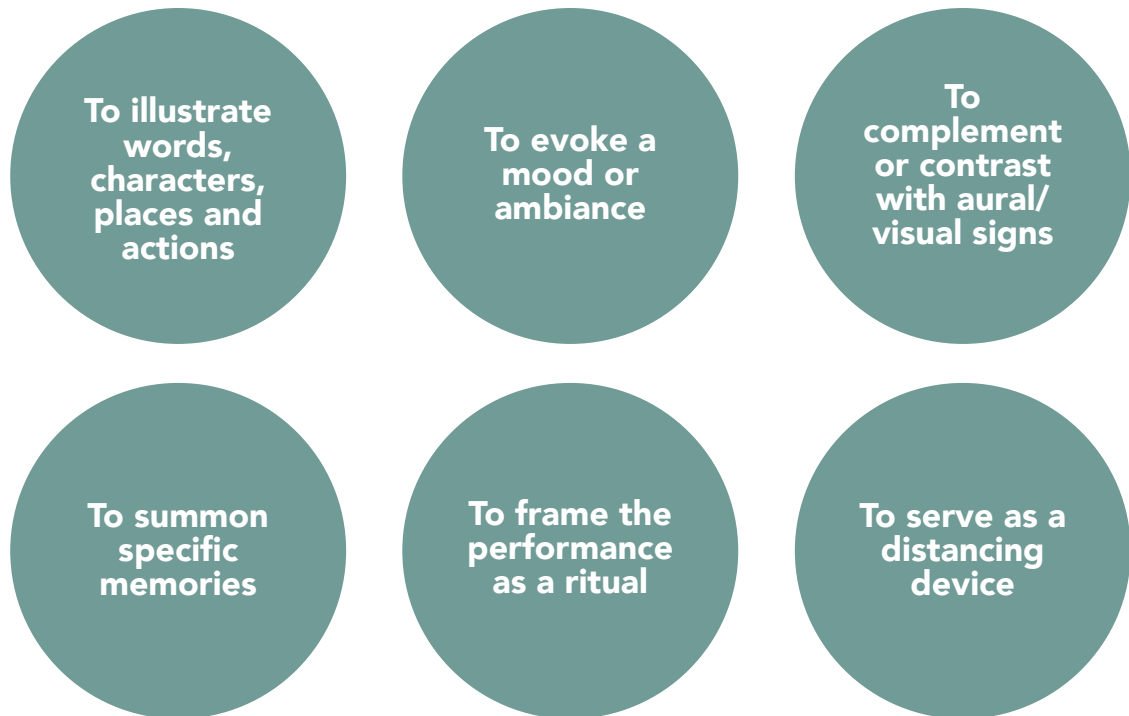
If I look specifically to olfactory design, the core question I ask myself is: "Why should this smell be here?" The answers to that can be varied, and I have noticed that Banes Taxonomy of Olfaction in performance (Banes, 2010) is often useful in determining the role and function of a scent. Banes extrapolates 6 main categories and argues that there is often overlap between them. I agree that it is reductive to put the entire function of a scent into a category, but it does create a very compelling case for the fact that scent has a function in design to begin with.

I will offer some examples of these categories in practice, starting with the first, most used category - "To illustrate words, characters, places and actions". This is by far the category we work with the most. As scent holds information about our surroundings and the people in it, it makes instinctive sense to use it for that purpose. Some examples:

In Memory Bar, during "Sweets over the Garden Wall", the first thing our guests smelled was the smell of a summer garden - it was only after the scent had been sprayed that the visuals followed.

In another edition of Memory Bar, a memory was featured that talked about a couple. The man had died, and every time the woman passed by a specific beach, she would think of him. Slowly he became synonymous with the beach. The piece was created in a wardrobe, where we could hear the woman talk about her memories through one of two phones coming out of the cupboard. The other phone just played the sound of the sea. To add a layer of intimacy, I scented the phone with the lady's voice with Chanel no. 5, the perfume her husband always gave her. His phone was scented with the smell of the sea. While listening to their tapes, the smell created a sense of breath, of proximity.

BANES' TAXONOMY OF SCENT IN PERFORMANCE



In Tarmac Toffee, we used the aroma of birch-tar in the toffee itself. The dish was based on the memory of a young girl who lived on the island during the WWII-occupation. In summer, the schoolchildren were allowed to go for walks during their breaks, and in wandering along the roads played a little game. The roads were made of tar, instead of the asphalt we use now, and it would soften under the summer sun. The children would conjure up the fantasy that this soft tar was actually toffee, and pull small pieces of the road, to teat them.

The dish was a tarmac flavored toffee, that would be pulled up with sticks. It was blackened with charcoal and had the smell and flavor of birch-tar, complementing, but also contrasting with itself - it was both the tar and the toffee.

I think the second and fourth category have a certain overlap - a ritual, of course, has a certain mood and ambiance, expressed by the word 'ritualistic'.

One of the exercises I usually do with my students at the Royal Academy of Art revolves around incense, and I agree it warrants its own category, as incense's religious connotations create such a specific mood. The exercise is as simple as it is effective - I take my class outside, to a quiet courtyard, with an incense-burner and a laptop. We light the incense and stand around it, as I initiate the first piece of music. Some days it is Pergolesi's Stabat Mater (Pergolesi, 1736) sometimes Zadok the Priest by ,,

I then move to a piece that opposed the previous atmosphere - usually it is Rammstein's 'Du Hast' (Rammstein - 1996 -1997). You may try this exercise for yourself, and I guarantee you will feel the perceptual experience change dramatically, purely from changing the music accompanying the scent.

Banes' 4th category - 'To summon specific memories' - does not always work in the way it is intended. It is a tricky beast to work with, as the odor memories we are trying to work with, are often deeply personal. As I point out in the conceptual framework itself, the Proust-effect only works one way. A magical moment did occur during one of my classes. I asked the students to create a transportation - through scent and an accompanying medium.

One of the students left for a while and came back with sprayed blotters - the pieces of paper perfumeries use to let you sample their fragrances. The smell was vaguely familiar, until he opened his laptop and the sound of indoor basketball played. This made everything click into place - we suddenly recognized that we were smelling Lynx-deodorant, and we were all back in high-school, in gym class.

Another piece by one of my students I found deeply touching was a perfume that accompanied an animated movie he had made. While the animations themselves were artistic and had that typical 'uncanny valley'-feeling, creating a perfume for one of the characters, created a sense of realism - but somehow also emphasized the 'unrealness' of the movie. The fragrance was made for the overworked mother, who was largely absent in the movie, of which her son was the protagonist. The fragrance was made from old frying fat, an artistic representation of sweat and cheap perfume. He called it something akin to 'the smell of a desperate life lived with good intentions'.

Banes, S. (2010) - Olfactory Performances, in Theatre and Performance Design - A Reader in Scenography - Collins, J., Nisbet, A. - 2010 - Routledge

Handel, G.F. (1727) Zadok the Priest - - Accessed on the 15th of March 2023 via https://www.youtube.com/watch?v=MIXgOOQ9_-RI

Pergolesi, G.B. (1736) - Stabat Mater - Accessed on the 15th of March 2023) via <https://www.youtube.com/watch?v=QYsjwKuC-Wg>

Rammstein (1996 - 1997) Du Hast Accessed on the 15th of March 2023 via <https://www.youtube.com/watch?v=W3q8Od5qJio>

Verbeek, C., Leemans, I. & Fleming, B., (2022) How can scents enhance the impact of guided museum tours? towards an impact approach for olfactory museology - 2022

A dark, atmospheric photograph of a beach at night. In the foreground, a campfire burns brightly, casting a warm glow on the sand. The background shows the dark expanse of the ocean and a dark sky. The overall mood is somber and contemplative.

MEMORY BAR

ADMISSION FOR THE
ART & OLFACTION
AWARDS 2022
- SADAKICHI

THOMAS BUCKLEY, RENSKÉ VAN
VROONHOVEN, NED LAWLOR

A dark wooden door with a stone wall on the left and a sign that reads "STUDIOS 1&2". The stone wall is made of rough, textured blocks. The door has a vertical wood grain. The sign is a dark rectangle with white text. The lighting is dramatic, with the stone wall being brightly lit and the door being in shadow.

STUDIOS 1&2

HELLO!

And thank you for taking the time to dive into our submission for the 2022 Art and Olfaction Awards!

My mission today is to take you through a Memory Bar menu as efficiently as possible. Because each course is an experience, setting and installation in itself, I will try to be as concise as possible, but I will have to ask you to bear with me for a bit.

I do hope that you enjoy our submission and want to thank you again for investing the time in reviewing it!

- The Memory Bar Team

MENU

PEACH BOG

iris flowers, peaches, bog, gunshot, a lost
white sandal

...

COAL SHIP

a small, fierce sip from a charcoal glass,
served over
steaming, bovine-scented hay

...

TARMAC TOFFEE

black birch-tar toffee, scraped from the summer road

...

SWEETS OVER THE GARDEN WALL

floral refreshment, boiled sweets, a
blossoming
garden, unbearable guilt

...

THE VEGA

Salvation and nourishment

This menu was presented at Arthouse Jersey
in 2020 by

attic lab.

SOCIETY *of*
COCKTAILS







PEACH BOG

AS PEOPLE ENTER THE SPACE THEY ARE EXCITED FOR THE EVENING OF EXPERIMENTAL COCKTAILS THEY ARE ABOUT TO ENJOY. THEY KNOW THEY'RE IN A SPACE KNOWN FOR ITS ART; BUT THIS IS DIFFERENT. THIS IS GOING TO BE FUN!

WHEN THEY WALK INTO THE SPACE IT LOOKS AS IF THEY'RE IN A WOODLAND AREA. SHADY BRANCHES ON THE BACK WALL, COMING FROM AN INSTALLATION THAT'S IN THE MIDDLE OF THE SPACE. THEY SMELL THE BOG AND AS THEY WALK UP TO THE CENTERPIECE, THEY FIND A WELCOME DRINK WITHIN. ABOVE IT THEY SEE HOLOGRAPHIC IRISES, BLOOMING AND WILTING.

THE DRINK IS A PEACH MIMOSA, THE FOAM ON TOP FLAVORED WITH EARTHY PYRAZINE, COMPLIMENTING THE SOFT SMELL OF DAMP SOIL IN THE AIR. THE STEMS OF THE GLASSES EXTEND TO COCKTAIL ALL THE WAY TO THEIR FINGERTIPS, THE PEACH FRAGRANCE LINGERS ON THEIR HANDS AS THEY ARE INVITED INTO THE MAIN AREA OF THE INSTALLATION

BOG INSTALLATION

PEACH MIMOSA

HOLOGRAPHIC IRISES

ANALOGUE FOREST PROJECTION

EARTHY PYRAZINE FOAM

GENTLE BOG AIR



COAL SHIP

PEOPLE ARE GUIDED INTO THE DARK MAIN AREA BY STEWARDS WITH TORCHES AND ARE ASKED TO TAKE A SEAT. A PERFUMER AND MIXOLOGIST ARE MAKING PREPARATIONS IN FRONT OF THEM.

THE BACK WALL TURNS INTO AN OCEAN AND WAVES CRASH TOWARDS THE GUESTS OVER THE TABLE. THEY HEAR A VOICE TALK ABOUT ONCE..

... ONCE DURING WWII, SHE AND HER FAMILY TRIED TO FLEE THE ISLAND. THEY WE'RE ALL CRAMMED ONTO A COAL BOAT AT NIGHT, HUDDLED BETWEEN THE COALS AND COWS. SUDDENLY! SEARCHLIGHTS OVERHEAD, THE GERMANS!

A PLATE OF HAY IS BROUGHT TO THE TABLE, IT'S WARM, STEAMING AND IT SMELLS OF ANIMALS LYING IN IT. HIDDEN IN THE HAY ARE SMALL COALS INTO WHICH A LIQUID IS Poured. HOMEMADE BITTERS ARE SPRAYED ONTOP OF THE COAL GLASSES AND EACH GUEST IS SERVED A COAL ON TOP OF A HANDFUL OF STEAMING HAY.

CUSTOM COAL GLASSES

HOMEMADE BITTERS - DAVANA/WORMWOOD

CAPSICUM INFUSED BOURBON

WARM, BOVINE-SCENTED HAY

SEARCHLIGHTS OVERHEAD

WAVES CRASHING





TARMAC TOFFEE

ANOTHER VOICE TALKS TO US. IT TELLS OF THE TIMES THE CHILDREN WERE AT SCHOOL AND HOW, DURING THE HOT SUMMERS, THEY WERE ALLOWED TO WALK THE ISLAND ON THEIR BREAKS. THEY DIDN'T HAVE ANYTHING TO EAT, LET ALONE ANY SWEETS. IN THEIR PLAY THEY TURNED TO THE ROADS.

THEY WEREN'T ASPHALT, LIKE THEY ARE NOW. THEY WERE TAR AND WENT SOFT AND GUMMY UNDER THE SCORCHING SUN. THE TABLE TURNS INTO BUBBLING TAR.

WHEN THE TAR WAS HOT ENOUGH, YOU COULD PULL PIECES OFF OF THE ROAD. THE CHILDREN CHEWED THEM LIKE TOFFEE.

THE TABLE BLACKENS AND TWO WHITE SQUARES APPEAR ON EACH SIDE. SMALL, ROAD-LIKE BLACK DISHES ARE SET DOWN AND STICKS ARE BEING DRAGGED THROUGH THE TAR.

EACH GUEST IS GIVEN A STICK WITH THE TAR TOFFEE.

"THEY NEVER HURT ANY OF US"

TARMAC TOFFEE

SERVED FROM A BUBBLING ASPHALT ROAD







SWEETS OVER THE
GARDEN WALL -
PART ONE

AFTER THE TARMAC TOFFEE THE ROOM HAS BLACKENED, AND REMAINED BLACK FOR A WHILE. SUDDENLY WE SMELL THE SCENT OF A SUMMER'S GARDEN. WHILE WE WONDER WHERE THE SMELL MIGHT COME FROM, WE SEE THE TABLE TURNING INTO A GARDEN WALL, FIREFLIES DARTING ACROSS. IT'S NOT LONG BEFORE THEY FIND THE BACK WALL AS WELL.

A VOICE TELLS US ABOUT THE TIMES THE CHILDREN OF THE ISLAND PLAYED IN THE GARDENS. SOMETIMES NAZI'S WOULD COME BY, AND HAND SWEETS OVER THE GARDEN WALL. THE CHILDREN HADN'T SEEN SWEETS IN AGES, BUT THEY THREW AWAY THE TOP ONE NONETHELESS. THEY DIDN'T WANT TO EAT SOMETHING A NAZI HAD TOUCHED.

'THEY WEREN'T THAT DIFFERENT FROM US, I'M SURE THEY DIDN'T WANT TO BE THERE ANY MORE THAN WE DID'

CRIPS CONFECTIONARY BAGS ARE HANDED TO THE GUESTS; INSIDE A GLASS THAT SMELLS OF BOILED LEMON SWEETS AND IS COATED IN SUGAR, NOT UNLIKE A SUGAR RIM, BUT ALL THE WAY ACROSS.

WHILE THE GUESTS SIP THEIR REFRESHING COCKTAILS IN THE GARDEN AIR, THEY FEEL THEIR FINGERS BECOMING STICKY WITH GUILT

SUMMER GARDEN AIR
BOILED LEMON SWEETS
GUILTY FINGERS

SWEETS OVER THE
GARDEN WALL -
PART TWO

THE GUESTS SIT IN THE GARDEN FOR A WHILE, ENJOYING THEIR COCKTAILS, SMELLING THE FLOWERS AND HEARING BIRDSONG. WHILE THEY'RE HANDS GET STICKIER A HAND-WASHING RITUAL IS PREPARED.

IN A VASE OF HOT WATER, FLOWERS ARE SCATTERED. THE WATER SLOWLY TURNS RED WITH HIBISCUS (IS IT BLOOD ON OUR HANDS?). SOME SOOTHING OILS ARE ADDED TO THE HOT WATER AND SOFT, FLOWER-DYED NAPKINS ARE DIPPED INTO THE WATER. EACH GUESTS RECEIVES A WARM PIECE OF CLOTH; IT SMELLS OF MIMOSA ABSOLUTE AND THE SUNDAY SOAPS OF GRANDMOTHERS.

THE GUESTS ARE ABLE TO CLEANSSE THEMSELVES OF THE GUILT.

"IT'S OKAY NOW"

FORGIVENESS

GRANDMOTHERS SUNDAY SOAPS

BLOOD-RED HIBISCUS

CLEANSING WARMTH







THE VEGA

BEFORE THE WAR ENDED, THE ISLAND FIRST HAD TO ENDURE THE HARSHTEST WINTER OF ALL. IT WAS FREEZING AND THE FOOD WAS NEARLY GONE. PEOPLE WERE PREPARING TO STARVE.

ONE DAY, THERE WAS MUMBLING AROUND THE ISLAND: PEOPLE TALKED OF A BOAT ARRIVING. EVERYBODY RUSHED TO THE COAST, RUNNING UP THE STEEP CLIFFS TO SEE.

AND IT WAS TRUE!

THE VEGA, A SHIP BRINGING EMERGENCY RATIONS FROM SCANDINAVIA LANDED ON ONE OF THE SHORES. IT CARRIED THE NECESSARY SUPPLIES TO STAY ALIVE THAT WINTER AND THE BAKERS WERE, AFTER MONTHS, ABLE TO BAKE AGAIN.

THE BREAD THEY MADE THAT DAY TASTED SO GOOD. PEOPLE COULDN'T BELIEVE IT WASN'T CAKE.

SALVATION

BREAD PUDDINGS

THE SCENT OF CAKE



BEHIND THE PIECE

MEMORY BAR IS AN ONGOING ARTPIECE, CREATED BY THOMAS BUCKLEY, RENSKÉ VAN VROONHOVEN AND NED LAWLOR. THEIR INTERDISCIPLINARY COLLABORATION HOLDS EXPERTISE IN SCENT-DESIGN, TACTILE EXPERIENCE, EMERGENT TECHNOLOGY, LARGE-SCALE PROJECTIONS, GASTRONOMY, SOUND-SCAPE COMPOSING AND COCKTAILS. THEY FREELY MOVE BETWEEN ALL OF THEIR DISCIPLINES, CREATING IMMERSIVE EVENTS FILLED WITH STORYTELLING; SOMETIMES CRASS AND PAINFUL, SOMETIMES POETIC AND GENTLE, ALWAYS GENERATING EMPATHY IN THEIR AUDIENCE.

"WE BELIEVE MEMORY BAR TO BE AN EMPATHY MACHINE; IT'S BORN FROM THE IDEA THAT WHEN PEOPLE ARE ABLE TO RE-LIVE OTHER PEOPLE'S LIVED EXPERIENCES, THEY GENERATE A NEW MEMORY OF THEIR OWN. WE WORK WITH EMERGENT TECHNOLOGY TO MAKE THIS TIME-TRAVEL POSSIBLE, AND USE THE LOWER SENSE TO STIMULATE THE BRAIN TO CREATE AN 'ACTUAL LIVED MEMORY'.

WITH THE FORMAT OF A COCKTAIL EVENING, WE PROVIDE A TRUSTWORTHY AND CALM FORMAT; WE DON'T WANT TO CREATE SENSORY OVERLOAD, BUT PROVIDE A GENTLE, ENJOYABLE EXPERIENCE TO OUR GUESTS, THAT INSTILLS THESE SOMETIMES INCREDIBLY HARSH REALITIES IN THEM.

WHEN YOU'VE WALKED A MILE IN SOMEONE ELSE'S SHOES, IT BECOMES IMPOSSIBLE TO HATE THEM"

WE HOPE YOU'VE ENJOYED THIS PROJECT AND WILL HUMBLY AWAIT YOUR JUDGEMENT. WE DO WANT TO THANK YOU FOR CONSIDERING MEMORY BAR FOR THE 2022 ART AND OLFACTION AWARDS.

WISHING YOU ALL THE BEST AND A LOT OF WISDOM WITH YOUR DECISIONS,

- THE MEMORY BAR TEAM

THOMAS, RENSKÉ & NED

Appendix 4

LITERATURE REVIEW

**2022-2023 ADVANCED
UNDERGRADUATE DIPLOMA
RESEARCH THEORY
AND PRACTICE**

RESEARCH STATEMENT

Since Richard Axel and Linda B. Buck won the Nobel Prize in 2004 "for their discoveries of odorant receptors and the organization of the olfactory system" (Nobel Prize Committee, 2004) we have seen a surge in olfactory research. Around the pandemic years of the 2020s, we have also seen olfaction become a more important cultural theme, as its absence revealed just how much it contributes to the human experience..

With this literature review I will, from the position of olfactory artist, researcher and teacher, determine where scent-culture currently stands and address one of the major questions we face moving forward by joining Larry Shiner (Shiner, 2020) in asking: 'Is an olfactory aesthetics possible?'

Keywords: scent culture, olfaction, olfactory art, olfactory aesthetics, art science, philosophy.

REVIEW METHODOLOGY

After working in the field in a practical capacity since 2014, I have gathered a lot of applied knowledge about olfaction, olfactory culture and scent in context. A first scaffolding for olfactory education was written as part of the course "Practical Perfumery for Olfactory Art" (ArtScience Interfaculty, 2022).

For this literature review, I am building on this foundation, by looking for appropriate sources from a larger body of literature I have examined through different stages of my work, adding onto that by creating an 'oil-spill' from footnotes and books pointed to by reputable sources, such as the Institute for Art and Olfaction (Institute for Art and Olfaction, 2022).

CONTEMPORARY SCENT CULTURE

Writing on scent often starts by pointing out that scent is our 'most elusive sense', that 'it is broadly disregarded by Western philosophy' and that it has an intimate connection to our memories - often illustrated by the ever-present Proustian Madeleine of Olfaction (Proust - 1913). I think this is a dated misunderstanding of the subject.

Although less research has been conducted into the subject of scent than, let say, visual culture, there is a vast body of research on the subject at this point. Over the past years some defining works of the genre have been published in the form of the aforementioned 'Art Scents' by Larry Shiner, Sophie Ann Barwich's 'Smellosophy' (Barwich, 2020), Harold McGee's 'Nose Dive' (McGee, 2020), Victoria Henshaw's books on her practice, like 'Design with Smell, Practices, Techniques and Challenges' (Henshaw, 2018), Paolo Pelosi's 'On the Scent' (Pelosi, 2016), and many more.

Besides published research, the past decade has seen many olfactory initiatives that open the world of scent to the larger public. Take the Institute for Art and Olfaction in Los Angeles, run by Saskia Wilson-Brown and her team (*The Institute for Art and Olfaction*), Klara Ravat's Smell Lab in Berlin (Ravat), A Library of Olfactive Material, lead by Clara Weale (Weale) in Schotland, or even Mediamatic's Scent Lab (*Mediamatic*), that was installed by the Institute for Art and Olfaction, during their Amsterdam residency.

There are several knowledge-based platforms, like the now inactive Scent Culture Institute, founded by researcher, curator and critic Ashraf Osman (*Osman*). (*Tullet, van Erp, 2022*) is "a European research project which bundles expertise in sensory mining and olfactory heritage." They develop novel methods to collect information about scent from (digital) text and image collections, to demonstrate how scent can be a viable means for connecting and promoting Europe's intangible cultural heritage. At this moment they have created an extensive database of AI findings and an explorer.

Independent olfactory researchers like Nuri McBride contribute to the field with projects like *Death/Scent* (*McBride, 2022*). *Odorama* (*Verbeek et al*), which used to be hosted by Caro Verbeek - and later Frank Bloem, explores the sense of smell through themed events. Olfactory artists such as Peter de Cupere (*de Cupere*) and Sissel Tolaas (*Tolaas*) paved the way for a movement of olfactory artists, and there is an increasingly visible amount of small, artisan perfumeries, some of which are welcoming to DIY practice and study, like Sara McCarthy's *4160Tuesdays* (*McCartney*) in London.

On the other end of the spectrum, there is a billion-pound fragrance industry (*Mordor Intelligence*), that creates scents for every product imaginable - from fine fragrances to laundry detergents and even the small bags we take outside when we walk our dogs to dispose of their unmentionables. Scent critic and curator Chandler Burr (*Burr, 2022*) takes the position that scent art has been present all around us for much longer than we assume, in the shape of perfumes, that have wrongfully been disregarded as an art form. He curated an exhibition as Department Curator at the Museum Arts and Design in New York, "The Art of Scent 1889-2012", to allow visitors to experience perfumes as artistic objects in the context of a museum.

Contemporary philosophers like Clare Batty (*Batty*) and Andreas Keller (*Keller*), who also curates a gallery in New York, have written prolifically on the subject, and the Oxford Bibliography says there is "a wealth of scientific publications on olfaction" (*Batty, 2022*) - some of which focus on the physiological mechanisms, while others look at the phenomenology of smell. All in all, I take the position that calling olfaction a small niche that is under-researched can be considered an outdated statement. Of course, when discussing such a vibrant and broad community of people, it is impossible to name all of them, so diving into the subject further will undoubtedly offer you even more insight into the state of olfactory affairs.

HOW CAN WE WORK TO AN OLFACTORY AESTHETICS?

While there is a booming scent-culture, critiquing, or even discussing, olfactory work remains a difficult feat. The first hindrance is that the language we use for olfactory matters can vary widely depending on cultural context, personal experience, and individual preferences. Looking at 'The Smell Report' by Kate Fox (*Fox*) the descriptions of Non-Western olfactory language show that there is no innate language system that is suitable for smell. Even the systems we use in Western society today are constantly in flux, resorting to figurative descriptions (*Herz and Engen, 1996*) or cross-modal descriptors (*Verbeek, 2012*).

The second hindrance to discussing olfactory work on its own merits is the fact that there is no widely recognized system for olfactory aesthetics, and we may even wonder, as Shiner does, if an olfactory aesthetics is possible. In answering this question, Shiner makes one of the most recent and complete contributions to this discussion in 'Art Scents', by structuring the arguments and countering them methodically.

Before we move to a discussion of these arguments, I will touch upon the first lines of Clement Greenberg's 'Towards a Newer Laocoön' (Greenberg, 1940). "Purists make extravagant claims for art because usually, they value it much more than anyone else does. For the same reason, they are much more solicitous about it. A great deal of purism is the translation of an extreme solicitude, an anxiousness as to the fate of art, a concern for its identity."

What Greenberg moves on to argue, is that a 'dominant art form' can arise within the broader spectrum of art: "...it becomes the prototype of all art: the others try to shed their proper characters and imitate its effects. The dominant art in turn tries itself to absorb the functions of the others." If we synthesize this idea and the topic of olfactory aesthetics, it may become apparent that we are partly judging olfactory art not by its own merits, but in comparison to art forms we are more familiar with.

Another key factor to add to Shiner's arguments is that of time. If we look at one of the main contrarians of a structured approach to the sense of smell, Immanuel Kant, we have to read his 'Critique of Judgement' (Kant, 1790) in the light of limited knowledge about the olfactory system.

While it is true that René Descartes had already, faultily but impressively, proposed that the sense of smell was mediated by the pineal gland in the brain (Descartes, 1664) and Carl Linnaeus proposed a system for classifying odours based on their perceived intensity and character (Linnaeus, 1747) Kant did not, for example, have access to the writings of 19th century German scientist Paul Ehrlich, who proposed the concept of "specific nerve energies," which suggested that different smells were detected by specific receptors in the nose (Ehrlich, 1891). Our current notions of olfactory receptors (Brann, Datta, 2020) would have seemed alien to him.

In this light, we can read Shiner's argument for a system of olfactory aesthetics as 1. a defense of olfactory art against a dominant medium, instead of as a defense by its own merits and 2. a defense against contrarians who had inferior technical knowledge about the subject. Nonetheless, it is a thorough, and vital contribution to the discussion as it is so structured and eloquently summarizes the debate that has been ongoing.

In his book, Shiner arrives at the conclusion that an olfactory aesthetics is indeed possible, by pointing out and removing three major barriers for an olfactory aesthetics:

- 1) "Smell is disreputable, defective, deceptive, and dispensable" - Shiner offers us evidence from psychology and contemporary neuroscience, showing humans are very good at detecting, discriminating, and learning smells. The concept that smell is primarily hedonic and emotional is countered by neuroscience studies that show how these deficits might not be intrinsic, as olfactory experts are able to make very fine cognitive discriminations between odours and are able to extend qualitative judgements to scents.
- 2) "Smell is a vestige of little use" - By tracing the historical and societal importance of smell in both non-Western and Western culture, Shiner refutes these charges and removes a second barrier for an olfactory aesthetics.
- 3) "The sense of smell is essentially mute" - Shiner's final argument against an olfactory aesthetics, is divided into two parts. First there may be a presumed universal physiological deficit prohibiting us from expressing scent through language. Secondly our inability to express the olfactory experience may be due to a general lack of human language for olfactory stimuli.

Shiner demonstrates his position this firstly by taking examples from non-Western culture in which people have abstract odour terms and are able to quickly identify smells, and secondly by examining scent in Western literature through writer such as Baudelaire, Rilke, Woolf, and Joyce and lastly by citing Proust's articulations of involuntary memories in Holocaust memoirs.

FINDINGS AND FUTURE RESEARCH QUESTIONS

In summary, the idea that our olfactory system is an elusive sense that escapes our attention and research is dated and should no longer be referred to in serious discourse. There is a bountiful, rich scent culture at the moment, that can be found in various fields: from the artistic to the scientific and from the innovative to the traditionally commercial.

The notion that scent is mostly hedonic and subjective, even if we take into regard that olfactory language often uses figurative and cross-modal terms, is disproven by many of Shiner's arguments for a system of olfactory aesthetics.

Regarding olfactory art, we may look to Greenberg's essay from 1940 and conclude that while we might be tempted to see scent in the light of other, dominant mediums of art, this does not mean that scent can not be seen as an expressive medium with its own merits.

Moving forward we may decide to leave Kant's hierarchical system of the senses behind and explore our sense of smell as a contributor to the human experience.

Special attention should be given to what scent has to bring to that experience through the study of the phenomenology of scent. Another contributor to a greater understanding of the sense of smell would be raising awareness around linguistic poverty regarding scents and promoting further training and education in the field of olfaction so we are able to have a more pluralistic debate on the matter.

Moving forward this larger insight will hopefully lead to more and more opportunities for scent to be used as a distinct medium, with its own unique merits, for the exploration of our history, past and present experiences

(1984 words)

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Appendix 5

**AN OLFACTORY
READING LIST**

2023 - 2024



**AN
OLFACTORY
READING
LIST**

2023 - 2024

INTRODUCTION

This reading list was drafted as part of my studies at the Institute for Continuing Education at the University of Cambridge. It is an attempt to structure the vast amount of literature that we presently have at our disposal. My aim is to create some sense of categorization, although, just like with the perfumer's organ, nothing seems to beat the alphabetical system!

After several attempts to create clearly outlined structures, I decided to mostly invest time in the ease of navigation. At the top of each page you will find links to each letter of the alphabet. The bottom of the page leads you back to the beginning of the document, where you can simply click a title to visit a description of the book

This reading list is, as all reading lists should be, a work in progress. By making it public and available at no further cost to the reader, I hope to make your olfactory research a little more easy and enjoyable!

Should you be inclined to help me with this endeavor and volunteer titles for this list, I will of course be most grateful. In this case you may contact me at rtvanvroomhoven@gmail.com (2023)

I hope you enjoy and I wish you all the best,

Renske

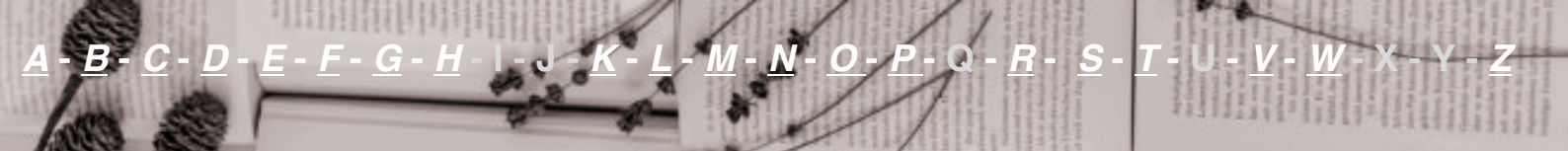
2023

A

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- Adler, I., Adler, R. (1966)** *Taste, Touch and Smell*
- Aftel, M. (2001)** *Essence and Alchemy: A Natural History of Perfume*
- Aftel, M. (2005)** *Scents & Sensibilities: Creating Solid Perfumes for Well-Being*
- Aftel, M. (2014)** *Fragrant: The Secret Life of Scent*
- Aftel, M., Patterson, D. (2004)** *Aroma: The Magic of Essential Oils in Foods and Fragrance*
- Aftel, M., Patterson, D. (2017)** *The Art of Flavor: Practices and Principles for Creating Delicious Food*
- Alavi, D. (2012)** *Le Snob: Perfume*
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Brewer, W. (2006)

Olfaction and the Brain

Burr, C. (2002)

The Emperor of Scent: A True Story of Perfume and Obsession

Burr, C. (2008)

The Perfect Scent: A Year Inside the Perfume Industry in Paris and New York

Burr, C., Weifenbach, T. (2014)

Dior: The Perfumes

C

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Biochemistry of Taste and Olfaction

Calof, A.L. (2012)

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D

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Organic Chemistry Made Ridiculously Simple

Devere, R., Calvert, M. (2010)

Navigating Smell and Taste Disorders

Dore, J. (2003)

The big book of perfume. For an olfactory culture

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The Fragrant Past: Perfumes of Cleopatra and Julius Caesar

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Doty, R.L. (2003)

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Drobnick, J. (2006)

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Dubrow, J., Lusby, L. (2014)

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Dyhouse, C. (2010)

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E

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Perfume Legends: French Feminine Fragrances

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The Diary of a Nose: A Year in the Life of a Parfumeur

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K., Butler, E. (2022)

Atlas of Perfumed Botany

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Perception of Odors

F

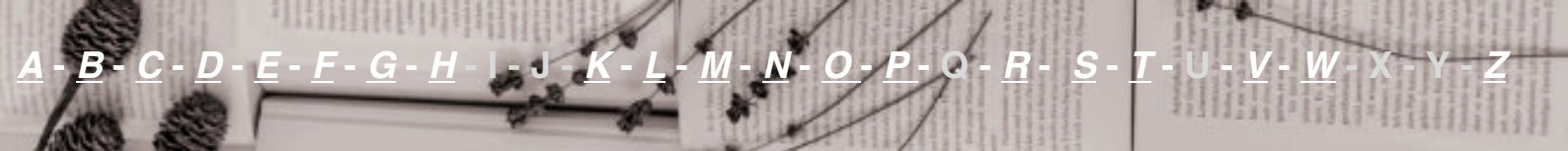
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Scented

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- Harad, A. (2012)** *Coming to My Senses: A Story of Perfume, Pleasure, and an Unlikely Bride*
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N

- Nakomoto, T. (2012)** *Human Olfactory Displays and Interfaces: Odor Sensing and Presentation*
- Nielsen, B.L. (2017)** *Olfaction in Animal Behaviour and Welfare*

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- Oppenheim, G. (2021)** *The Ghost Perfumer: Creed, Lies, & the Scent of the Century*
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- Parsons Schaeffer, J. (2016)** *The Nose, Paranasal Sinuses, Nasolacrimal Passageways, and Olfactory Organ in Man: A Genetic, Developmental, and Anatomico-Physiological Consideration*
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R

Rhind, J.P. (2014)

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Rimmel, E.

The Book of Perfumes

Rindisbacher, H.J. (1993)

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Sell, C.S. (2006)

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Septimus Piesse, G.W., (1855)

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Shaw, B. (2017)

The Smell of Fresh Rain: The Unexpected Pleasures of Our Most Elusive Sense

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Evolution and Senses: Opsins, Bitter Taste, and Olfaction

Shiner, L.E. (2020)

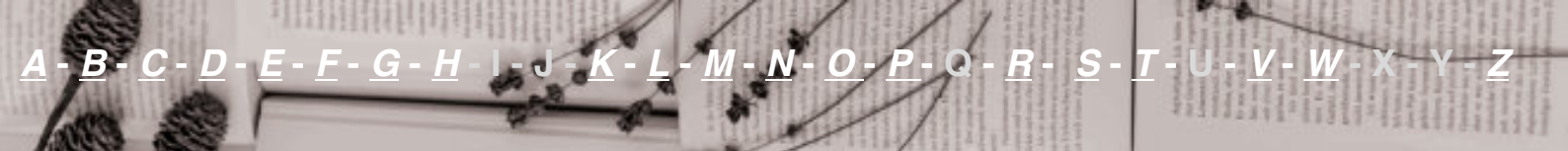
Art Scents: Exploring the Aesthetics of Smell and the Olfactory Arts

Silva Teixeira, C. S., et al. (2016)

Unravelling the olfactory sense: from the gene to odor perception. Chemical Senses

Spedale, S. (2019)

How to Smell the Wine: Practical manual to learn the techniques of olfactory analysis of wine step by step



Smith, L.L. (2016)

The Role of Olfaction on Human Psychology: Your Sense of Smell Turns Out to Be Hot-Wired to your Emotional Brain

Stamelman, R., Freeman, M.

Perfume: Joy, Scandal, Sin - A Cultural History of Fragrance from 1750 to the Present

Stefano, M.L. (2012)

Safeguarding Intangible Cultural Heritage

Stiles, K.G., M.M. (2012)

The Chemistry of Essential Oils Made Simple

Stoddart, M. (1990)

The Scented Ape: The Biology and Culture of Human Odour:

Süskind, P., Woods, J.E. (1985)

Perfume: The Story of a Murderer

Swanson, L.W., Björklund, A.,

Integrated Systems of the CNS, Part III:

Hökelt, T. (1996)

Cerebellum, Basal Ganglia, Olfactory System

T

Toko, K. (2013)

Biochemical Sensors: Mimicking Gustatory and Olfactory Senses

Tullett, W. (2019)

Smell in Eighteenth-Century England: A Social Sense

Turin, L. (2006)

The Secret of Scent: Adventures in Perfume and the Science of Smell

Turin, L., Sanchez, T. (2008)

Perfumes: The Guide

Turin, L., Sanchez, T. (2011)

The Little Book of Perfumes: The Hundred Classics

Turin, L., Sanchez, T. (2018)

Perfumes The Guide 2018

V

Verbeek, C. (2021)

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Vernon Pearlstine, E. (2022)

Scent: A Natural History of Fragrance

Vroon, P. (1997)

Smell, the Secret Seducer

W

**Welge-Luessen, A.,
Hummel, T. (2013)**

*Management of Smell and Taste Disorders:
A Practical Guide for Clinicians*

Willem, J.-P., (2022)

*Alzheimer's, Aromatherapy, and the Sense
of Smell: Essential Oils to Prevent Cognitive
Loss and Restore Memory*

Williams, D. G. (2004)

Perfumes of Yesteryear

Williams, T. (2013)

*Cult Perfumes: The World's Most Exclusive
Perfumeries*

Wilson, D.A. (2006)

*Learning to Smell: Olfactory Perception
from Neurobiology to Behavior*

Z

Zhou, W. (Dissertation)

*Human olfactory perception and olfactory
communications of social information*

Zucco, G.M. (2012)

*Olfactory Cognition: From Perception and
Memory to Environmental Odours and
Neuroscience*

A

Ackerman, D. (1991) - A Natural History of the Senses

Diane Ackerman's lusciously written grand tour of the realm of the senses includes conversations with an iceberg in Antarctica and a professional nose in New York, along with dissertations on kisses and tattoos, sadistic cuisine and the music played by the planet Earth.

Category: Natural History

Adler, I., Adler, R. (1966) - Taste, Touch and Smell

Explains how the senses of smell, taste, and touch work through the nervous system and the purpose served by each of the senses.

Category: Neurology, Taste, Flavour

Aftel, M. (2001) - Essence and Alchemy: A Natural History of Perfume

Renowned perfumer Mandy Aftel explores the primal nature and fundamental importance of aroma in everyday life, teaching people about the nature of smell and the idea of "olfactory consciousness" in *Essence and Alchemy: A Natural History of Perfume*.

Category: Natural History

Aftel, M. (2005) - Scents & Sensibilities: Creating Solid Perfumes for Well-Being

Delve into the world of natural aromas and discover their profound effect on emotional well-being, from relieving stress to enhancing sensuality. Renowned perfumer Mandy Aftel shares everything you need to know to create personalized handmade solid perfumes. Aftel has created custom scents for top celebrities like Kate Hudson and Madonna, and has been featured in magazines such as *Vogue*, *O* and *Vanity Fair*. She explains the science of "top," "middle," and "base" notes, and discusses the subtleties of fragrances that will unlock the secrets to finding the perfect perfume for every individual.

Step-by-step instructions along with helpful photographs make this book simple and easy to use, and explain basic equipment necessary for getting started, such as beeswax, a hot plate, and a grater. Aftel also tells how to pick the right containers to store scents, from vintage boxes to jars.

"Smelling her extraordinary collection of oils took me to beautiful places...the fragrance that Aftel blended exclusively for me is full of citrus and herbal fragrances that complement my culinary life."

Alice Waters, owner of *Chez Panisse* restaurant in Berkeley.

Mandy Aftel is the founder of *Aftelier*, through which she creates one-of-a-kind perfumes for individuals and private labels. Ms. Aftel is also a counselor and the author of three previous books, including *Essence and Alchemy*. She lives in Berkeley, California. Her website can be found at www.aftelier.com.

Category: Perfume making

Aftel, M. (2014) - Fragrant: The Secret Life of Scent

Mandy Aftel is widely acclaimed as a trailblazer in natural perfumery. Over two decades of sourcing the finest aromatic ingredients from all over the world and creating artisanal fragrances, she has been an evangelist for the transformative power of scent. In *Fragrant*, through five major players in the epic of aroma, she explores the profound connection between our sense of smell and the appetites that move us, give us pleasure, make us fully alive. Cinnamon, queen of the Spice Route, touches our hunger for the unknown, the exotic, the luxurious.

Mint, homegrown the world over, speaks to our affinity for the familiar, the native, the authentic. Frankincense, an ancient incense ingredient, taps into our longing for transcendence, while ambergris embodies our unquenchable curiosity. And exquisite jasmine exemplifies our yearning for beauty, both evanescent and enduring.

In addition to providing a riveting initiation into the history, natural history, and philosophy of scent, *Fragrant* imparts the essentials of scent literacy and includes recipes for easy-to-make fragrances and edible, drinkable, and useful concoctions that reveal the imaginative possibilities of creating with—and reveling in—aroma. Vintage line drawings make for a volume that will be a treasured gift as well as a great read.

Category: Natural History, Social History, Philosophy

Aftel, M., Patterson, D, (2004) - Aroma: The Magic of Essential Oils in Foods and Fragrance

Turn a brilliant natural perfumer loose in a chef's kitchen and you get vanilla perfume, saffron, ginger, and blood orange bath salts, and a cucumber mist. Turn a brilliant chef loose in a perfumer's pantry and you get rose-infused steamed bass, peach-jasmine sorbet, and scores of other startlingly original recipes using floral and herbal aromas.

Aroma permeates every cuisine, from ancient to modern, in every culture and at every level, but what this pioneering cookbook, by chef Daniel Patterson and perfumer Mandy Aftel, makes evident is that aroma, not taste, is our primary experience of food. Without aroma there is no flavor. By focusing on aroma, we intensify all aspects of food, and immeasurably enhance the experience of cooking and eating.

While many cookbooks include some discussion of the use of aromatics in cooking, none concentrates on this essential link, where a few drops of a fragrant essence can make commonplace dishes memorable and good dishes great. Both the food recipes and the fragrance recipes in *Aroma* are powerfully alluring, whether it's a coffee cologne or an orange flower custard. Cumin vinaigrettes and lemon verbena mists waft off the page. Lavender makes a grilled steak sizzle while white ruffle makes for a haunting perfume.

Explicit information on ingredients, equipment, and terms and techniques complements one fragrance recipe and three food recipes for nearly thirty ingredients—lime, mint, green tea, black pepper, vanilla, and ginger, among others. This seminal work will open your senses to the aromatic, even sensual, dimension of food and fragrance.

Category: Perfume making, Flavour, Taste

Aftel, M., Patterson, D. (2017) - The Art of Flavor: Practices and Principles for Creating Delicious Food

Two masters of composition - a chef and a perfumer - present a revolutionary new approach to creating delicious food.

Michelin two-star chef Daniel Patterson and celebrated natural perfumer Mandy Aftel are experts at orchestrating ingredients. Yet in a world awash in cooking shows and food blogs, they noticed, home cooks get little guidance in the art of flavor. In this trailblazing guide, they share the secrets to making the most of your ingredients via an indispensable set of tools and principles:

- The Four Rules for creating flavor
- A Flavor Compass that points the way to transformative combinations
- "Locking," "burying," and other aspects of cooking alchemy
- The flavor-heightening effects of cooking methods
- The Seven Dials that let you fine-tune a dish

With more than eighty recipes that demonstrate each concept and put it into practice, *The Art of Flavor* is food for the imagination that will help cooks at any level to become flavor virtuosos.

Category: Perfume making, Flavour

Alavi, D. (2012) - Le Snob: Perfume

From bespoke and personalised perfumes to natural perfumery and classic scents such as Chanel No 5, 'Le Snob' is a guide to the highest quality perfumes from around the world.

Category: Perfumes

Arctander, S. (1962) (1994) - Perfume and Flavor Materials of Natural Origin

Perfume and Flavor Materials of Natural Origin, first published in 1960, is the classic, authoritative reference for a vast array of natural products used in perfumes, scents, flavorings, foods, and medicine throughout the world. Part One defines and describes processing methods used to extract or refine the products into usable form; Part Two includes more than 500 monographs on the natural raw materials used to produce perfumes, flavorings, etc. Appendices include a classification of important materials by their scent, and worldwide production figures for major products. Fully indexed, the book also includes 62 pages of photographs, making this one of the standard reference works on natural materials for perfumers, flavor chemists, and anyone wanting more information on these products.

From the book's Preface: "Perfume and Flavor Materials of Natural Origin contains practical descriptions of available materials, their origin, production and processing, appearance, odor and flavor type, evaluation, application and availability with brief notes on their main constituents, replacements and most common adulterants."

Category: Perfume making, Chemistry

Arctander, S. (2017) - Perfume & Flavor Chemicals (Aroma Chemicals) Vol.I

A perfume-flavorist's practical description of most of the commercially available perfume and flavor chemicals, with their chemical structure and practical physical data, appearance, odor and flavor type, reported and suggested uses, production and evaluation, with literature references for further details and study. Volume 1 Monographs 1 ABIETIC ACID to 1506 (trans-2-HEPTEN-1-AL)

Category: Perfume making, Chemistry

Arctander, S. (2017) - Perfume & Flavor Chemicals (Aroma Chemicals) Vol.II

A perfume-flavorist's practical description of most of the commercially available perfume and flavor chemicals, with their chemical structure and practical physical data, appearance, odor and flavor type, reported and suggested uses, production and evaluation, with literature references for further details and study. Volume II Monographs 1507 trans-4-HEPTENAL to 2928: TETROHYDRO-para-TOLYLALDEHYDE

Category: Perfume making, Chemistry

Arctander, S. (2019) - Perfume & Flavor Chemicals (Aroma Chemicals) Vol.III

A perfume-flavorist's practical description of most of the commercially available perfume and flavor chemicals, with their chemical structure and practical physical data, appearance, odor and flavor type, reported and suggested uses, production and evaluation, with literature references for further details and study. Volume III Monographs 2929: TETROHYDRO-2-(para-TOROLOXY)-PYRAN to 3102: ZINGIBERENE Also includes reprise of Monographs 2926/2927 Tables of odors and flavors, classified in basic groups Explanation to Index Radicle synonym list Index to all volumes Literature References

Category: Perfume making, Chemistry

B

Banes, S. (2006) - The Senses in Performance

This ground-breaking anthology is the first to be dedicated to assessing critically the role of the human sensorium in performance.

Senses in Performance presents a multifaceted approach to the methodological, theoretical, practical and historical challenges facing the scholar and the artist. This volume examines the subtle actions of the human senses including taste, touch, smell and vision in all sorts of performances in Western and non-Western traditions, from ritual to theatre, from dance to interactive architecture, from performance art to historical opera.

With eighteen original essays brought together by an international ensemble of leading scholars and artists including Richard Schechner and Philip Zarrilli. This covers a variety of disciplinary fields from critical studies to performance studies, from food studies to ethnography from drama to architecture.

Written in an accessible way this volume will appeal to scholars and non-scholars interested in Performance/Theatre Studies and Cultural Studies.

Category: Olfactory Art & Performance

Barillé, E. (2002) - Guerlain

Eau de Cologne Imperiale, Jicky, l'Heure Bleue, Mitsouko, Shalimar, these immortal classics of the fifth sense are landmarks in the remarkable history of the House of Guerlain. Since its founding in 1828, Guerlain has created subtle compositions light years away from simple floral imitations. These fragrances invoke a mood in which romanticism and mystery are combined, and have attracted a prestigious clientele that includes royalty and connoisseurs. At the turn of the century, Aime Guerlain, the creator of Jicky, composed the famous magic formula Guerlinade--a velvety, intoxicating alliance of rose, jasmine, vanilla and tonka bean--which has become the sensual hallmark of every creation, including the most recent ones. It is a note that stirs the emotions and embodies the spirit of a great perfumer and his legend.

Category: Perfume

Barkai, E., Wilson, D.A.(2014) - Odor Memory and Perception (Progress in Brain Research)

Written by the leading researchers in the field of olfactory perception and memory Includes diverse models systems from invertebrates to humans Includes diverse technical approaches to the study of olfactory memory and perception Includes overview of the most recent research advances in this field

Category: Memory, Perception, Neurology

Barwich, A.S. (2020) - Smellosophy: What the Nose Tells the Mind

Decades of cognition research have shown that external stimuli "spark" neural patterns in particular regions of the brain. This has fostered a view of the brain as a space that we can map: here the brain responds to faces, there it perceives a sensation in your left hand. But it turns out that the sense of smell--only recently attracting broader attention in neuroscience--doesn't work this way. A. S. Barwich asks a deceptively simple question: What does the nose tell the brain, and how does the brain understand it?

Barwich interviews experts in neuroscience, psychology, chemistry, and perfumery in an effort to understand the biological mechanics and myriad meanings of odors. She argues that it is time to stop recycling ideas based on the paradigm of vision for the olfactory system. Scents are often fickle and boundless in comparison with visual images, and they do not line up with well-defined neural regions. Although olfaction remains a puzzle, Barwich proposes that what we know suggests the brain acts not only like a map but also as a measuring device, one that senses and processes simple and complex odors.

Accounting for the sense of smell upsets theories of perception philosophers have developed. In their place, Smellosophy articulates a new model for understanding how the brain represents sensory information.

Category: Neurology, Psychology, Chemistry, Biology

Batty, Clare. "Olfactory Experience I: The Content of Olfactory Experience." *Philosophy Compass* 5.12 (2010a): 1137–1146.

In this first encyclopedia article, Batty provides an overview of philosophical discussion of the content of olfactory experience. Although she presents her own view of olfactory content at the end of the article, her main aim is to consider the kinds of challenges that olfactory experience presents for upholding a representational view of olfactory experience. (Batty, 2022- <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-bibItem-0007>)

Category: Philosophy

Batty, Clare. "Olfactory Experience II: Objects and Properties." *Philosophy Compass* 5.12 (2010b): 1147–1156.

DOI: [10.1111/j.1747-9991.2010.00352.x](https://doi.org/10.1111/j.1747-9991.2010.00352.x)

In this second encyclopedia article, Batty considers two issues: (1) the nature of perceptual objects and (2) the nature of olfactory perceptual properties. She not only surveys what philosophers have said about these issues so far, but considers the most plausible views and most pressing questions in each area of inquiry (Batty, 2022 - <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-bibItem-0007>)

Category: Philosophy

Beauchamp, Gary K., and Linda Bartoshuk, eds. *Tasting and Smelling. Handbook of Perception and Cognition.* San Diego, CA: Academic Press, 1997.

In addition to chapters on taste, this volume includes a helpful chapter on olfactory psychophysics, as well as chapters containing discussion of olfactory disorder and the role of olfaction in flavor perception. (Batty, 2022 - <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-bibItem-0007>)

Category: Taste, Flavour, Perception, Psychophysics, Disorders

Betts, E. (2017) - *Senses of the Empire: Multisensory Approaches to Roman Culture*

The Roman empire afforded a kaleidoscope of sensations. Through a series of multisensory case studies centred on people, places, buildings and artefacts, and on specific aspects of human behaviour, this volume develops ground-breaking methods and approaches for sensory studies in Roman archaeology and ancient history. Authors explore questions such as: what it felt like, and symbolised, to be showered with saffron at the amphitheatre; why the shape of a dancer's body made him immediately recognisable as a social outcast; how the dramatic gestures, loud noises and unforgettable smells of a funeral would have different meanings for members of the family and for bystanders; and why feeling the weight of a signet ring on his finger contributed to a man's sense of identity.

A multisensory approach is taken throughout, with each chapter exploring at least two of the senses of sight, hearing, smell, taste and touch. The contributors' individual approaches vary, reflecting the possibilities and the wide application of sensory studies to the ancient world. Underlying all chapters is a conviction that taking a multisensory approach enriches our understanding of the Roman empire, but also an awareness of the methodological problems encountered when reconstructing past experiences.

Category: History

Bloch, I. (1934) (2002) - *Odoratus Sexualis: A Scientific and Literary Study of Sexual Scents and Erotic Perfumes*

Study of the uses and effects of aromas, scents and body odours in seduction and sexual intimacy. The author concludes that gender; race, ethnicity and complexion all affect the specific odor of humans.

Category: Sexuality, History

Blodgett, B. (2010) - *Remembering Smell: A Memoir of Losing--and Discovering--the Primal Sense*

In November 2005, Bonnie Blodgett was whacked with a nasty cold. After a quick shot of a popular nasal spray up each nostril, the back of her nose was on fire. With that, Blodgett—a professional garden writer devoted to the sensual pleasures of garden and kitchen—was launched on a journey through the senses, the psyche, and the sciences. Her olfactory nerve was destroyed, perhaps forever. She had lost her sense of smell.

Phantosmia—a constant stench of “every disgusting thing you can think of tossed into a blender and pureed”—is the first disorienting stage. It’s the brain’s attempt, as Blodgett vividly conveys, to compensate for loss by conjuring up a tortured facsimile. As the hallucinations fade and anosmia (no smell at all) moves in to take their place, Blodgett is beset by questions: Why are smell and mood hand-in-hand? How are smell disorders linked to other diseases? What is taste without flavor? Blodgett’s provocative conversations with renowned geneticists, smell dysfunction experts, neurobiologists, chefs, and others ultimately lead to a life-altering understanding of smell, and to the most transformative lesson of all: the olfactory nerve, in ways unlike any other in the human body has the extraordinary power to heal.

Category: Memory, Disorders

Bradley, M. (2014) - Smell and the Ancient Senses

The first comprehensive introduction to the role of smell in the history, literature and society of classical antiquity, *Smell and the Ancient Senses* examines the ways in which the olfactory sense contributed to our perceptions of bodies, environments, behaviour and morality.

Category: History

Breipohl, W. (1986) - Ontogeny of Olfaction: Principles of Olfactory Maturation in Vertebrates

<https://link.springer.com/book/10.1007/978-3-642-71576-1>

The impacts of specifically experienced external and internal environments upon phylogenetically established pathways of ontogenetic development seem to be responsible for the intra-species variation of organisms. Therefore normal function, as well as disorders of sensory systems, can often be better understood by considering the principles of ontogenetic maturation and the time schedule of environmental influences during that period. Sensory organs and systems have long been considered to be hereditarily determined for their analysis of the environment.

However, it is becoming more and more clear that their specificity depends also upon the sequence and nature of environmental impacts, impacts during highly sensitive periods of postnatal life being most effective. The present book, using an interdisciplinary approach, has brought together various descriptions of developmental processes for one of the phylogenetically oldest sensory analytical circuits, the olfactory system.

Although investigations of a wide range of vertebrates are included, from marsupials to man, the main attention was given to rodents, the most frequently used experimental animal in this fields of research. Authors have been asked for reviews and original considerations on the rationales of developmental principles in the olfactory system, and wherever appropriate to highlight its uniqueness or similarities with other parts of the nervous system. Authors were also asked to consider future needs of research in their fields, to describe their own approaches in this context, and to outline general horizons of neurodevelopmental research."

Category: Animal Olfaction

Brewer, W. (2006) - Olfaction and the Brain

Olfaction and its relation to mental health is an area of growing interest, evidenced by the 2004 Nobel Prize in Physiology or Medicine being awarded for discoveries relating to odorant receptors and the organization of the olfactory system. Olfaction is of particular interest to specialists seeking a fuller understanding of schizophrenia, as clear deficits in the sense of smell could predict schizophrenia in apparently unaffected individuals. In this timely book, Warrick Brewer and his team of experts set out our current understanding of olfaction and mental health, relating it to broader principles of neural development and processing as a foundation for understanding psychopathology. The neuropathological, neuropsychological and neuropsychiatric aspects of olfactory function and dysfunction are all covered (drawing on the latest neuroimaging techniques where appropriate), and indications for future research and applications are discussed. This will be a source of state-of-the art information and inspiration to all mental health professionals.

Category: Neurology, Neuropsychology

Burr, C. (2002) - The Emperor of Scent: A True Story of Perfume and Obsession

The Emperor of Scent tells of the scientific maverick Luca Turin, a connoisseur and something of an aesthete who wrote a bestselling perfume guide and bandied about an outrageous new theory on the human sense of smell. Drawing on cutting-edge work in biology, chemistry, and physics, Turin used his obsession with perfume and his eerie gift for smell to turn the cloistered worlds of the smell business and science upside down, leading to a solution to the last great mystery of the senses: how the nose works.

Category: Perfume

Burr, C. (2008) - The Perfect Scent: A Year Inside the Perfume Industry in Paris and New York

From the "New York Times" perfume critic, a stylish, fascinating, unprecedented insider's view of an industry and its charismatic characters. No journalist has ever been allowed into the ultrasecretive, highly pressured process of originating a perfume. But Chandler Burr, the "New York Times" perfume critic, spent a year behind the scenes observing the creation of two major fragrances.

Now, writing with wit and elegance, he juxtaposes the stories of the perfumes--one created by a Frenchman in Paris for an exclusive luxury-goods house, the other made in New York by actress Sarah Jessica Parker and Coty, Inc., a giant international corporation. We follow Coty's mating of star power to the marketing of perfume, watching "Sex and the City"'s Parker heading a hugely expensive campaign to launch a scent into the overcrowded celebrity market. Will she match the success of Jennifer Lopez? Does she have the international fan base to drive worldwide sales?

In Paris at the elegant Hermes, we see Jean Claude Ellena, his company's new head perfumer, given a challenge: he must create a scent to resuscitate Hermes's perfume business and challenge "le monstre" of the industry, bestselling Chanel No. 5. Will his pilgrimage to a garden on the Nile supply the inspiration he needs? The answer lies in Burr's informative and mesmerizing portrait of some of the extraordinary personalities who envision, design, create, and launch the perfumes that drive their billion-dollar industry."

Category: Perfume

Burr, C., Weifenbach, T. (2014) - Dior: The Perfumes

An exquisite exploration of the relationship between Christian Dior and perfumes, celebrating sixty-five years of inspiration, innovation, and style.

Category: Perfume

C**Cagan, R. (1981) - Biochemistry of Taste and Olfaction**

Biochemistry of Taste and Olfaction examines the biochemical aspects of taste and olfaction and their relevance to nutrition, medicine, and food science. More specifically, it considers the biological processes that influence dietary habits, nutritional status, and enjoyment of food, as well as other important social and biological phenomena. It also describes biochemical mechanisms at the peripheral receptor level in taste and olfaction, with emphasis on the role of the cell surface, along with neurotransmitters and other neurochemical aspects of the olfactory system.

Organized into five sections comprised of 24 chapters, this book begins with an overview of biochemical approaches used in studying the phenomena of taste and olfaction. It then proceeds with a discussion of olfactory receptor mechanisms, the accessibility of odorant molecules to the receptors, the role of cilia in olfactory recognition, and the involvement of receptor proteins in vertebrate olfaction.

Middle chapters focus on the chemosensation, major histocompatibility complex and olfactory receptors, taste receptor mechanisms, biochemistry of sugar reception in insects, intensity/time phenomena in sugar sweetness, and recognition of taste stimuli at the initial binding interaction. The reader is also introduced to the physicochemical principles of taste and olfaction, molecular mechanisms of transduction in chemoreception, biochemical mechanisms in vertebrate primary olfactory neurons, neurotransmitter biochemistry of the mammalian olfactory bulb, and chemical sensing by bacteria. Examples of chemical sensory systems are included.

This book will be of interest to biochemists, physiologists, neurobiologists, neuroscientists, molecular biologists, food scientists, students, and specialists in psychology, neurophysiology, organic chemistry, and nutrition.

Category: Biochemistry, Taste, Flavour

Calof, A.L. (2012) - Systems Biology of Neural Stem Cells: Lessons from the Olfactory Epithelium

The study of olfactory neural stem cells provides us with a window into the way systems biologists approach various questions. Discussion of the application of engineering feedback principles to the analysis biological systems, and the way imaging and computational biology has enhanced the quality and volume of data available to life scientists.

Category: Biology, Neurology

Carterette, Edward C., and Morton P. Friedman, eds. *Tasting and Smelling. Handbook of Perception 6A*. New York: Academic Press, 1978.

In addition to an overview of the history of theorizing about olfaction, this volume contains helpful chapters on the biophysics and chemistry of odor. (Batty, 2022 - <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-bibltem-0007>)

Category: Taste, Flavour, History, Chemistry, Biophysics

Cheok, A.D., Karanunayaka, K. (2018) - *Virtual Taste and Smell Technologies for Multisensory Internet and Virtual Reality (Human-Computer Interaction Series)*

Currently, Internet and virtual reality communication is essentially audio-visual. The next important breakthrough of the Internet will be the communication and sharing of smell and taste experiences digitally. Audio-visual stimuli are frequency based, and they can be easily digitized and actuated. On the other hand, taste and smell stimuli are based on chemical molecules, therefore, they are not easy to digitize or actuate. To solve this problem, we are required to discover new digital actuation technologies for taste and smell. The authors of this book have experimented on developing digital actuation devices for several years.

This book will provide a complete overview of the importance of digitizing taste and smell, prior works, proposed technologies by the authors, other state of the art research, advantages and limitations of the proposed methods, and future applications. We expect digital taste and smell technologies will revolutionize the field of multisensory augmented reality and open up new interaction possibilities in different disciplines such as Human Computer Interaction, Communication, and Augmented and Virtual Reality.

Category: Virtual Reality, Digital Culture, Taste, Flavour

Classen, C. (1993) - *Worlds Of Sense: Exploring The Senses In History And Across Cultures*

"Worlds of Sense" is an historical and cross-cultural study of the senses and the ways in which different cultures "make sense" of the world. In the West we think in terms of visual models such as "world view". The Ongee of the Andaman Islands live in a world ordered by smell and the Tzotzil of Mexico hold that temperature is the basic force of the cosmos. What different modes of consciousness are created by treating smell or touch as a fundamental way of knowing? How does the sensory order of a culture relate to its social order? Is there a natural order of the senses? By asking such searching questions of different cultures, Constance Classen aims to illustrate that the differences in sensory perception can be striking. "Worlds of Sense" argues that perception cannot be treated as a purely physical act but that the list, hierarchy and ordering of the senses are deeply related to time and culture.

Category: History

Classen, C. (1994) - Aroma: The Cultural History of Smell

Smell is a social phenomenon, given particular meanings and values by different cultures. Odours form the building blocks of cosmologies, class hierarchies, and political odours. They can enforce social structures or transgress them, unite people or divide them, empower or disempower. The authors argue that the sociology of smell is repressed in the modern West, and its social history ignored.

This book breaks the olfactory silence of modernity. It offers the first comprehensive exploration of the cultural role of odours in Western history - from antiquity to the present. It also covers a wide variety of non-Western societies. Its topics range from the medieval concept of the odour of sanctity, to the aromatherapies of South America, and from olfactory stereotypes of gender and ethnicity in the modern West to the role of smell in postmodernity. Its subject matter will fascinate anyone who likes to nose around in the inner workings of culture

Category: History

Classen, C. (2016) - A Cultural History of the Senses in the Age of Empire

The 19th century was a time of new sensory experiences and modes of perception. The raucous mechanical intensity of the train and the factory vied for attention with the dazzling splendour of department stores and world fairs. Colonization and trade carried European sensations and sensibilities to the world and, in turn, flooded the West with exotic sights and savours. Urban stench became a matter of urgent public concern. Photography created a compelling alternate reality accessible only to the eye. At the turn of the 20th century, the telephone and the radio isolated and extended the sense of hearing and electrical networks spread their webs throughout cities. These novel experiences were reflected in contemporary art and literature, which strove for new ways to express modern sensibilities. *A Cultural History of the Senses in the Age of Empire* brings together a group of eminent historians to explore the aesthetic, cultural and political formation of the senses during a period of momentous change.

The *Cultural History of the Senses* set delves into the sensory foundations of Western civilization, taking a comprehensive period-by-period approach which provides a broad understanding of the life of the senses from antiquity to the modern day. Each of the volumes explores the following topics: The Social Life of the Senses; Urban Sensations; The Senses in the Marketplace; The Senses in Religion; The Senses in Philosophy and Science; Medicine and the Senses; The Senses in Literature; Art and the Senses; and Sensory Media. Superbly illustrated, this six-volume set is the most authoritative and comprehensive historical survey of the senses available.

Category: History

Classen, C., Howes, D. (2017) - The Museum of the Senses: Experiencing Art and Collections

Traditionally sight has been the only sense with a ticket to enter the museum. The same is true of histories of art, in which artworks are often presented as purely visual objects. In *The Museum of the Senses* Constance Classen offers a new way of approaching the history of art through the senses, revealing how people used to handle, smell and even taste collection pieces. Topics range from the tactile power of relics to the sensuous allure of cabinets of curiosities, and from the feel of a Rembrandt to the scent of Monet's garden. The book concludes with a discussion of how contemporary museums are stimulating the senses through interactive and multimedia displays.

Classen, a leading authority on the cultural history of the senses, has produced a fascinating study of sensual and emotional responses to artefacts from the middle ages to the present. *The Museum of the Senses* is an important read for anyone interested in the history of art as well as for students and researchers in cultural studies and museum studies.

Category: Olfactory Art

Cobb, M. (2020) - Smell: A Very Short Introduction

Our sense of smell - or olfaction as it is technically known - is our most enigmatic sense. It can conjure up memories, taking us back to very specific places and emotions, whilst powerful smells can induce strong feelings of hunger or nausea. In the animal kingdom smell can be used to find food, a mate, or a home; to sense danger; and to send and receive complex messages with other members of a species. Yet despite its fundamental importance in our mental life and in the existence of all animals, our scientific understanding of how smell works is limited.

In this *Very Short Introduction*, Matthew Cobb describes the latest scientific research on smell in humans and other mammals, in insects, and even in fish. He looks at how smell evolved, how animals use it to navigate and communicate, and disorders of smell in humans. Understanding smell, especially its neurobiology, has proved a big challenge, but olfactory science has revealed genetic factors that determine what we can and cannot smell, and why some people like a given smell while others find it unbearable. He ends by considering future treatments for smell disorders, and speculating on the role of smell in a world of robots.

Category: General

Corbin, A. (1988) - The Foul and the Fragrant: Odor and the French Social Imagination

In a book whose erudition and originality had a dazzling impact on first publication in France and the UK, Alain Corbin has put the sense of smell on the historical map. It is a perfect companion to Patrick Suskind's bestseller *Perfume*.

Category: History

Cowart, Beverly J., and Nancy E. Rawson. "Olfaction." In *The Blackwell Handbook of Perception*. Edited by E. Bruce Goldstein, 567–600. *Handbooks of Experimental Psychology*. Oxford: Blackwell, 2001.

This handbook entry provides an excellent overview of scientific research on and issues of olfaction. It covers the nature of the stimulus, the physiological mechanisms of the olfactory system, the basics of olfactory quality perception, and olfactory dysfunction. (Batty, 2022, <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-biblitem-0007>)

Category: Neurology, Biology

Crasto, C.J. (2013) - Olfactory Receptors: Methods and Protocols

This Methods in Molecular Biology book covers knowledge dissemination and theoretical assessment of OR structure and function, plus development and use of expression systems and experimental functional analysis. Offers reproducible protocols, tips and more."

Category: Neurology, Biology

Cupere, de, P. - Scent in context: olfactory art

For 20 years artist and curator Peter de Cupere has been the most prolific and proactive proponent of olfactory art in the world. This book is a unique document to witness the artist's research, the origins and context of his work and practice, and offers a view and presentation of more than 500 artworks. 7 authors, 472 pages, more than 1500 illustrations and images, 22 images with 11 different scratch and sniff hidden smells, all make this 3kg book a complete guide to discover the world of olfactory art.

The publication will surprise and interact with the reader with soft and beautiful smells but in contrast might also shock while presenting intense or mind-teasing smells. Refine your nostrils when reading this book!

Category: Olfactory Art

Curtis, T., Williams, D.G. (2008) - An Introduction to Perfumery

First published in 1994, this book has become the standard reference work for perfumery students throughout the world. Intended as a first-year text, the book assumes no prior knowledge of perfumery. The authors provide integrated coverage of topics from raw materials to supermarket shelves, from science to creation, and through to marketing and business policy.

The power of fragrances to communicate is strongly emphasized and an explicit framework of odour vocabulary provided. Detailed discussion is included of the new product development process and the central role of the perfume brief. For this edition, all chapters have been revised, some considerably, and the book will be of great value to any writer or researcher wishing to consider any issues relating to fragranced products.

Tony Curtis, Principal Lecturer in Business Policy and International Business, Plymouth Business School, Plymouth University, has many years of experience in the aroma trades industry in research, development, production, application, creative perfumery, evaluations and marketing. He lectures on international business with special emphasis on the aroma trades.

The late David Williams was a consultant and author of books on essential oils. He taught and developed the teaching of perfume technology in both further and higher education, in industry and by distance learning.

"This will be a very useful tool for those looking for a comprehensive text on the business of perfumery."

Felix Buccelato, *Perfumer & Flavorist*, May 2002

Category: Perfume Making, Chemistry

D

Davis, G.A. (2013) - Organic Chemistry Made Ridiculously Simple

"The book is a clear, concise review of the structure of organic molecules and their reactivity. It carefully avoids extraneous topics that would detract from the main topics. It is a wonderful supplementary text for students during their first exposure to Organic Chemistry."

Frank R Gorga, PhD, Associate Prof. and Chair Dept. of Chemical Science,
Bridgewater State College

"Dr. Gene Davis, a talented teacher and organic chemist, has written a magnificently clear overview of the most important principles and reactions in Organic Chemistry. His approach, while following the sequence of most standard textbooks, emphasizes understanding over rote memorization and facilitates the rapid and enjoyable learning of this difficult subject. His book should be read in all introductory college Organic Chemistry courses."

Stephen Goldberg MD, Professor Emeritus Univ of Miami Sch of Medicine Author of
Clinical Biochemistry Made Ridiculously Simple.

Category: Chemistry

Devere, R., Calvert, M. (2010) - Navigating Smell and Taste Disorders

Navigating Smell and Taste Disorders is a unique collaboration between a doctor and a food consultant that both addresses the subject of smell and taste loss and provides food preparation tips and a special recipe section that will appeal to other senses and make food attractive again. This is a must-have reference book for all those living with smell and taste disorders.

The book covers the whole disorder including:

How smell and taste work

Causes of smell and taste problems

Treatments

What you can expect when you visit a specialist

Recipes that will appeal to other senses and make food attractive again

First-person accounts of coping with this

Navigating Smell and Taste Disorders is the inaugural book in the series Neurology Now Books™ from the American Academy of Neurology. Inspired by Neurology Now®, the AAN's leading neurologic patient information magazine, Neurology Now Books are written from a multidisciplinary approach, combining the expertise of a neurologist with other related experts and patients and caregivers. Each volume will provide the reader, with the most up-to-date information, answers to questions and concerns, and first-person accounts of others who are living with a neurologic disorder.

Category: Flavour, Taste, Disorders, Neurology

Dore, J. (2003) - The big book of perfume. For an olfactory culture

The team from *Nez*, the olfactory magazine invites you on a very special journey to explore perfume in all its facets, delving into the heart of a fascinating yet little-known world. This book lifts the curtain on the best kept secrets of perfumery, answering all your questions about the world of smell.

- How does the sense of smell work?
- How has perfumery developed over the centuries?
- Where do perfume ingredients come from?

- What does a perfumer do?
- How is a fragrance created, developed, and produced
- How is mainstream perfumery shaped by marketing?
- What is the role of independent perfumery?
- What happens to a perfume after it is launched?
- How do I educate my nose and become a knowledgeable perfume lover?

Category: Perfume

Donato, G. (1994) - The Fragrant Past: Perfumes of Cleopatra and Julius Caesar

The sacred nature of perfumes, ointments, and incense is characteristic of rite and ritual in all ancient civilizations. Ancient and biblical literatures are filled with references to frankincense, spikenard, saffron calamus, cinnamon, myrrh, and aloe. The highly sophisticated art of making perfumes developed at the zenith of Greek civilization influenced the Romans, and by the first centuries of the Roman Empire, the Mediterranean peoples had reached an extraordinary level of olfactory culture.

The *Fragrant Past* recreates this sensual refinement in its evocation of seven Roman fragrances reproduced by Giuseppe Donato from evidence discovered at the remains of Cleopatra's own cosmetic workshop. The twenty-two masterworks in this exhibition--loaned to Emory University Museum by the Museo Nazionale Romano--include some of the most significant Roman portrait sculptures known. In the exhibition catalog, each portrait is first presented in a striking full-color photograph, and then detailed in four different perspectives in black and white photographs, accompanied by a detailed scholarly description.

Two historical essays by the authors place the magnificent sculptures in the context of Roman society and relate whatever information survives about their discovery. This beautifully illustrated volume provides detailed descriptions of ancient ingredients, and explains the intricate and various uses of scent in Roman daily life.

Category: History

Dove, R. (2010) - The Essence of Perfume

Perfume has always been an exclusive industry, from its early days with France quickly claiming the title as the premier centre of the perfume industry to the current multi-million dollar industry retaining its image of luxury and glamour. In *The Essence of Perfume* the story of perfume, from ancient Egypt where the fragrance Kypi induced mass surrender when it was offered in worship to the sun god, through the rivalry between Coco Chanel and Elsa Schiaparelli, and up to modern day celebrity fragrances, is told by the world expert in perfume.

Roja Dove is without doubt the world's leading fragrance authority. Described not only as a perfume historian but also a storyteller, Dove's genuine passion and often risqué wit are infused within the pages of this authoritative guide to the world of perfume. The book includes chapters encompassing the social and scientific history of scent. Our sense of smell is discussed, focusing on how it has evolved and why we respond to odors in the way we do. The birth of the modern perfume industry is outlined, looking into society's attitude to fragrance and the progress towards perfumery as we know it. The techniques involved in the process of making perfume are detailed including the methods of extraction used to obtain the essential oils that form the building blocks of perfumery. Furthermore, the raw materials of perfume and their olfactory qualities are explored, leading onto how a perfumer constructs a fragrance and the principle styles and strengths of fragrance that are created.

Dove then goes on to look at the great creations in perfumery from 1889, decade by decade with descriptions and their socio-economical context. The perfumers and the stories behind the houses are discussed revealing the characters that have revolutionized the industry, told with Roja's knowledge and humor. In a beautifully photographic section the bottles and the crystal houses are explored with the iconic bottles they produced. Roja also looks towards the future of the perfume industry and how celebrities, and their fans, have influenced this.

Category: Perfume

Doty, R.L. (2003) - Handbook of Olfaction and Gustation

Examines the biochemistry, physiology, and anatomy of the olfactory, gustatory, and trigeminal chemosensory systems. The text explores the role of olfactory assessment in disease diagnosis and provides an up-to-date review of chemosensory research. in the medical, food, beverage, flavour, perfume, and energy industries.

Category: Biology, Neurology, Taste, Flavour

Doty, R.L. (2003) - The Great Pheromone Myth

Mammalian pheromones, audiomones, visuomones, and snarks—Richard Doty argues that they all belong in the same category: objects of imagination.

For more than 50 years, researchers—including many prominent scientists—have identified pheromones as the triggers for a wide range of mammalian behaviors and endocrine responses. In this provocative book, renowned olfaction expert Richard L. Doty rejects this idea and states bluntly that, in contrast to insects, mammals do not have pheromones.

Doty systematically debunks the claims and conclusions of studies that purport to reveal the existence of mammalian pheromones. He demonstrates that there is no generally accepted scientific definition of what constitutes a mammalian pheromone and that attempts to divide stimuli and complex behaviors into pheromonal and nonpheromonal categories have primarily failed. Doty's controversial assertion belies a continued fascination with the pheromone concept, numerous claims of its chemical isolation, and what he sees as the wasted expenditure of hundreds of millions of dollars by industry and government.

The Great Pheromone Myth directly challenges ideas about the role chemicals play in mammalian behavior and reproductive processes. It is a must-have reference for biologists, psychologists, neuroscientists, and readers interested in animal behavior, ecology, and evolution.

Category: Biology, Neurology, Sexuality

Drobnick, J. (2006) - The Smell Culture Reader

Here is a much-needed overview of what is arguably our most elusive sense. Sight and hearing have been the subject of numerous books, while the so-called "lower senses" have remained relatively unexplored despite powerful and complex social meanings. From hygiene to aromatherapy, the foul to the fragrant, smell is shown here to be much more than a physical act of perception.

Category: General, Sociology

Dubrow, J., Lusby, L. (2014) - The Book of Scented Things: 100 Contemporary Poems about Perfume

What if 100 contemporary American poets were sent individually selected vials of perfume, fragrances chosen to reflect the authors' voices, aesthetics, or writerly obsessions? What if each poet wrote something new in response? *The Book of Scented Things* collects the results of this strange, aromatic experiment: poems of longing and of childhood memory, poems of place and philosophy and politics, poems about the challenge of writing poems about perfume. This is an anthology whose words will linger on your pulse points long after even the base notes have faded.

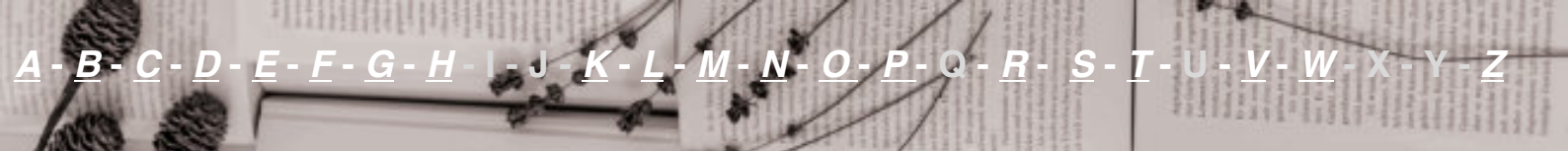
Contributors are Seth Abramson, Cristin O'Keefe Aptowicz, James Arthur, Sarah Arvio, Beth Bachmann, Aaron Baker, Ned Balbo, Brian Barker, Rick Barot, Sandra Beasley, Nicky Beer, Erin Belieu, Elana Bell, Dan Bellm, Mark Bibbins, Mary Biddinger, Traci Brimhall, Brian Brodeur, Jericho Brown, Michelle Chan Brown, Stacey Lynn Brown, Lisa D. Chávez, Chad Davidson, Erica Dawson, Katy Didden, Jehanne Dubrow, Michael Dumanis, Moira Egan, Robin Ekiss, Jill Alexander Essbaum, Tarfia Faizullah, Elyse Fenton, Rebecca Morgan Frank, Gregory Fraser, Elisa Gabbert, Jeannine Hall Gailey, John Gallaher, Melody S. Gee, Carmen Giménez Smith, Juliana Gray, George Green, Rachel Hadas, Meredith Davies Hadaway, James Allen Hall, Leslie Harrison, Yona Harvey, K. A. Hays, Rebecca Hazelton, H. L. Hix, Carrie Jerrell, Laura Kasischke, Dore Kiesselbach, Keetje Kuipers, Ilyse Kusnetz, Deborah Landau, Nick Lantz, Dorothea Lasky, Mari L'Esperance, Shara Lessley, Sandy Longhorn, dawn lonsinger, Lindsay Lusby, Amit Majmudar, David Mason, Adrian Matejka, Jamaal May, Shara McCallum, Shane McCrae, Erika Meitner, Philip Metres, Tyler Mills, Ander Monson, Idra Novey, Lisa Olstein, Alan Michael Parker, Nathaniel Perry, Kiki Petrosino, Emilia Phillips, Patrick Phillips, Jessica Piazza, John Poch, Hilda Raz, Brynn Saito, Jane Satterfield, Zach Savich, Jason Schneiderman, Bruce Snider, Gabriel Spera, Alison Stine, Yerra Sugarman, Mathias Svalina, Matthew Thorburn, Maureen Thorson, Brian Turner, Sarah Vap, Cody Walker, Connie Wanek, Caki Wilkinson, Catherine Wing, and Matthew Zapruder.

Category: Perfume, Poetry

Dyhouse, C. (2010) - Glamour: Women, History, Feminism

In this lavishly illustrated book, author Carol Dyhouse surveys the world of glamour from early Hollywood right up to Madonna. She deftly unpacks the ever-changing nature of the word, its relationship to femininity and fashion, and its place in twentieth century social history. With wit and insight, Dyhouse conducts a dazzling tour of the history and meaning of costume, cosmetics, perfume, and fur; and disentangles some of the arguments surrounding femininity, appearance and power; and directly addresses feminist concerns. As Dyhouse shows with style and flair, glamour as an expression of desire and entitlement in women can't simply be dismissed as an oppressive, or subjective male fantasy, but carries celebratory and liberating meanings for women.

Category: Feminism, Sociology, History



E

Edwards, M. (1998) - Perfume Legends: French Feminine Fragrances

Stunningly produced, this lavish and fascinating volume charts the history and creation of the most famous French feminine perfumes. From such classics as Chanel No.5 to Mugler's 'Angel', this beautiful book explains how these fragrances were made, designed and marketed and why some are now considered to be masterpieces. Written by Michael Edwards, whose expertise and knowledge of perfume is unequalled.

Category: Perfume, History

Edwards, M., Roudnitska, M. (2000) - Fragrances of the World 2000 (ISBN13: 9780958741958)

Category: Perfume, History

Ellena, J.-C. (1980) (2009) - Perfume: The Alchemy of Scent

In this international bestseller, the exclusive in-house perfumer to Herms reveals the art and business of creating precious scents. 12 b&w illustrations.

Category: Perfume, Perfume Making

Ellena, J.-C. (2012) - The Diary of a Nose: A Year in the Life of a Parfumeur

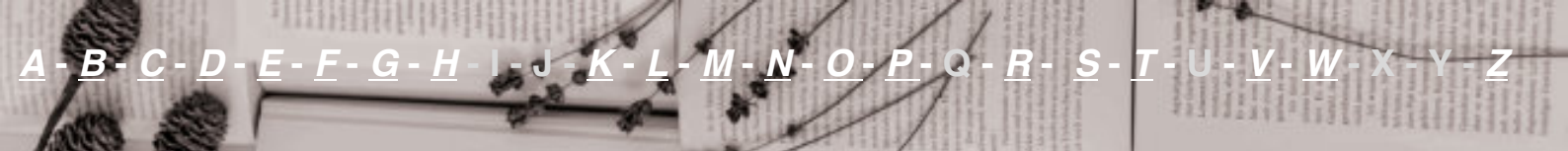
The French bestseller *The Diary of a Nose* is the story behind the creation of a perfume, from the head perfumer at Hermès.

Perfume creation is an exclusive and secretive endeavour. What is day to day life like for a perfume-maker? How does the creation of a new scent begin? How do you capture the essence of a smell on the skin?

For one year, Jean-Claude Ellena kept a diary of his life as 'parfumeur exclusif' ('le nez' or 'the nose') for Hermès. Believing that creating a scent is like creating a work of art, and describing himself as a writer using 'olfactory colours', he explains how all of the five senses come into play when creating a perfume. He also reveals how inspiration can come from a market stall, a landscape, or even the movement of calligraphy, and concludes this charming, perceptive diary with recipes for natural fragrances, each made up of three synthetic ingredients, to create the illusion of smells like freesia, orange blossom, grapefruit, pear, chocolate, cashew and cotton candy.

This is the story of a quest to capture what is most elusive. Jean-Claude Ellena offer readers a rare insight into the secrets of his business, his art, and his life as one of the world's most important and admired perfumers.

Category: Perfume, Perfume Making



Ellena, J.-C., Doering-Froger, K., Butler, E. (2022) - Atlas of Perfumed Botany

For perfume makers, each smell carries with it a multitude of associations and impressions that must be carefully analyzed and understood before the sum of all its parts emerges. All perfumers have their own idiosyncratic methods, drawn from their individual olfactory experiences, for classifying fragrances. In *Atlas of Perfumed Botany*, virtuoso perfumer Jean-Claude Ellena leads readers on a poetic, geographic, and botanical journey of perfume discovery. Ellena offers a varied and fascinating cartography of fragrances, tracing historical connections and cultural exchanges. Full-page entries on plants ranging from bergamot to lavender are accompanied by detailed and vivid full-color botanical illustrations.

Category: Perfume, Perfume Making, Biology

Engen, T. (1982) - Perception of Odors

The *Perception of Odors* presents concisely and clearly some of the important aspects in the study of olfaction such as perception, human pheromones, and odor pollution.

The book consists of 11 detailed chapters. Chapters 1 and 2 serve as the introduction as it outlines the basic principles, historical development, and the anatomy and physiology of olfaction. A chapter on "Psychophysics" is included wherein it covers the history of the measurement of odors and developments in the psychophysics of smell. The following chapters deal mostly with areas of research such as odor masking, deodorization, adaptation, odor mixture, and memory. Chapter 9 tackles the relationship of smell, particularly the perception of odor, to other senses. The last two chapters discuss the possible future areas of research and problems in odor perception.

This book is a valuable reference to students and researchers studying sensation and perception.

Category: Neurology, History, Biology

F

Fearnly, L. (2019) - Scented

A compelling and poignant search for identity through perfume.

Granny Seren told me I had a natural talent for perfume making, and I believed her because she seemed to know what she was talking about and she never lied. It was Seren who introduced me to the idea of a signature scent.

As a university lecturer, Sin didn't need a signature scent to know who she was. But, prompted by her job loss following restructuring of the humanities - and the effect this has on her identity - she begins to construct a perfume of herself. Note by perfume note, referencing scent memories and recent events, she rebuilds herself, *Scented*.

Category: Perfume, Perfume Making

Feydau, de, E., Lizop, J. (translator) (2004) - A Scented Palace: The Secret History of Marie Antoinette's Perfumer

This book offers a new look at the world of Marie Antoinette through the story of her personal and exclusive perfumer, Jean-Louis Fargeon. Jean-Louis served Marie for fourteen years until 1789 when the Revolution swept across France, its wrath aimed at the extravagances of the Royal Court and those who served it. Fargeon, a lifelong supporter of the Republican cause but a purveyor to the court, was in a dangerous position. Yet he remained fiercely loyal to Marie Antoinette, beyond her desperate flight to Varennes, her execution and even through his own imprisonment and trial. *A Scented Palace* is a wonderful window into the world of France during its most brutal and violent days.

Category: History, Perfume

G

Gemert, van, L.J., Patte, F., Devos, M. (1990) - Standardized Human Olfactory Thresholds

This book provides a homogeneous inventory of weighted and averaged human olfactory thresholds for hundreds of chemicals. Until now data on olfactory thresholds has not been standardized and different values have been scattered throughout the literature. The authors have gathered together threshold values and have used a systematic approach to standardization, collecting masses of data from a wide variety of sources to arrive at a standard threshold value for each chemical. A short explanation of the mathematical methods used by the authors is given, while the bulk of the book is taken up by the table of values. This is a comprehensive reference for scientists working in chemoreception, zoology, food science, government health regulation, and others for whom it is important to measure levels of air-borne chemicals.

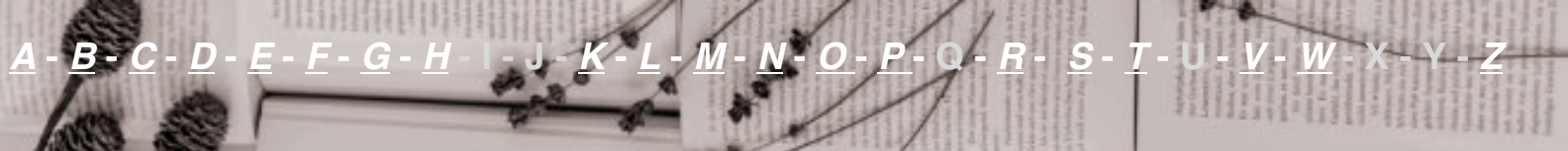
Category: Neurology, Olfactory Tresholds, Chemoreception

Gestalten (2019) - The Essence - Discovering the World of Scent, Perfume & Fragrance

Scents are linked to our most cherished memories. A fleeting smell in the street-a person's perfume, the smell of holiday treats baking-can transport us back in time in an instant, uncovering memories so vivid it is like they happened yesterday. No wonder then, that fragrance, with its ability to conjure whole worlds with a whiff, has captivated us as humans for centuries.

The *Essence* explores this mysterious sense and delves into the history, culture, and science that have shaped the multi-billion dollar perfume industry into what it is today. Join us as we reveal the power of scent and fragrance to captivate, from lavender fields of Provence and that the laboratories where perfumes are created, to incense producers in India. Meet the trailblazers shaping the future of perfumery as we explore the vital role that technology and scented products will play in the 21st century. *The Essence* is an inviting read for fragrance novices and connoisseurs alike. Discover your new and fragrant world.

Category: Perfume, Sociology, History



Gilbert, A. (1995) - Compendium of Olfactory Research: Exploration in Aroma-Chology: Investigating the Sense of Smell and Human Response to Odors, 1982-1994

Research sponsored by the Olfactory Research Fund reports on the effects of smells on sleep, stress, alertness, social interaction, and feelings of well-being. Contains sections on fundamentals of odor perception, fragrance and psychophysiology, olfactory conditioning, scent and social behavior, mood, cultural and historical perspectives, and applications. Subjects include olfactory perception in infants, using aroma to reduce distress during magnetic resonance imaging, and the influence of odors on mood-related behavior. No index. Annotation c. by Book News, Inc., Portland, Or.

Category: Sociology, Neurology

Gilbert, A. (2014) - What the Nose Knows: The Science of Scent in Everyday Life

Everything about the sense of smell fascinates us, from its power to evoke memories to its ability to change our moods and influence our behavior. Yet because it is the least understood of the senses, myths abound. For example, contrary to popular belief, the human nose is almost as sensitive as the noses of many animals, including dogs; blind people do not have enhanced powers of smell; and perfumers excel at their jobs not because they have superior noses, but because they have perfected the art of thinking about scents.

In this entertaining and enlightening journey through the world of aroma, olfaction expert Avery Gilbert illuminates the latest scientific discoveries and offers keen observations on modern culture: how a museum is preserving the smells of John Steinbeck's Cannery Row; why John Waters revived the "smellie" in Polyester; and what innovations are coming from artists like the Dutch "aroma jockey" known as Odo7. From brain-imaging laboratories to the high-stakes world of scent marketing, What the Nose Knows takes us on a tour of the strange and surprising realm of smell.

Category: Sociology, Olfactory Art

Gilbert, K. (2013) - Perfume: The art and craft of fragrance - Learn how to create your own personal fragrance, with easy-to-follow recipes for perfumes, bath and body products to make at home

At a time when advertising bombards us with the hard sell for the latest celebrity perfumes, fragrance expert Karen Gilbert shows how to create and blend your very own signature scent. Perfume: The Art and Craft of Fragrance introduces us to the psychology of smell and explains how fragrance can influence our moods and behavior, and gives a brief overview of perfume through the ages. A key chapter teaches you how to train your nose to recognize the five different fragrance families (floral, oriental, citrus, chypre, fougere), and how to identify the top, middle and base notes of a perfume. Once you have understood the basics of how to build a fragrance, learn how to layer scents by creating perfume oils, sprays, and solids, plus scented bath and body products and home fragrance sprays from the easy step-by-step recipes. Illustrated throughout with charming artworks and photographs, this book is the perfect introduction to the art and romance of creating perfume.

Category: Perfume, Perfume Making

Grainger, N. (2010) - Quintessentially Perfume

This luxurious hard-cover book chronicles the development and universe of perfume over the course of two hundred pages and nine fascinating chapters. Perfume lovers will appreciate the beautifully illustrated and in-depth interviews of perfume creators, eloquent articles from perfume writers and experts, as well as a showcase chapter paying tribute to thirty-nine world-class perfume brands. These include a rich and varied cross section of collections that cover different styles and approaches including brands whose appeal has gained mainstream recognition, as well as those who have deliberately sought to retain their niche identity.

Category: Perfume

Grasse, M.C., (1996) - Jasmine: The Flowers of Grasse

This book takes us on a colourful and aromatic promenade through many countries over the centuries to discover the imagery of a flower as exceptional as it is little-known by the general public. Only a few specialists have ever studied its representation in art. There is multitude of differing representations in the decorative arts and furniture decoration, which tended to get lost during the Art Nouveau period due to its smallness and fragility. This publication should help to bring it back to notice.

Category: Perfume, Perfume Making

Groes, S., Francis, R.M. (2021) - Smell, Memory, and Literature in the Black Country

From Banks's brewery's hoppy stink to groaty pudding to spicy curry, Sebastian Groes and R. M. Francis have assembled a new literary history of the smells and memory that belong to the Black Country. This often overlooked region of the United Kingdom at the frontlines of post-industrial upheaval is a veritable treasure trove for studying the relationship between olfaction and memory.

Smell, Memory, and Literature in the Black Country is an interdisciplinary exploration of the relationship between smell and memory in which the contributions consider both personal and communal memory. Drawing on psychology, neuroscience, memory studies, and philosophy, the critical essays reconsider "psychogeographical" tropes through cutting-edge sensory and philosophical engagements with physical space and human behaviour. The creative contributions from writers including Liz Berry, Narinder Dhama, Anthony Cartwright, and Niall Griffiths meditate on the senses, place, and identity. Not only does this book illustrate the rich cultural heritage of the Black Country, it also will appeal to those interested in place writing.

Category: Memory, Literature, Sociology

Guérer, Le, A., Miller, R. (translator) (1994) - Scent: The Mysterious and Essential Powers of Smell

"All my genius resides in my nostrils, " claimed Friedrich Nietzsche. Now comes a splendid new voice to bear him out - Annick Le Guérer. In this enchanting, erudite, and highly readable exploration of all things olfactory, she investigates the uses and properties of scent through the ages in relation to magic, myth, religion, sex, discrimination, philosophy, and medicine. From the perfumed rituals of ancient religions to the saintly "odor of sanctity"; from the aromatic cures of the Middle Ages to the black market for spiceladen mummies; from Proust's tea-dipped madeleine to our contemporary "odorophobia, " Le Guérer explains and documents the mysterious and essential powers of smell: to attract or repel; call up deep memory; induce lust, love, hunger, even trance. Recalling by turns Patrick Suskind's *Perfume* and Diane Ackerman's *A Natural History of the Senses*, *Scent* is an enchanting melange of storytelling and scholarship, a sensual journey across boundaries of time and culture that touches on universal myths and intimate desires.

Category: Philosophy, Neurology, History, Sociology

H

Haley Epstein, C., (2019) - Nose Dive

Adventures for your nose in art, anthropology, and science, the book *Nose Dive* is a broad introduction to olfactory culture meant for artists or anyone curious about the power of scent. Something is in the air with respect to our most powerful and least regarded sense. This book demystifies the world of scent, provides springboards for further study, and presents exercises for shifting gears with your nose. A must-read for anyone intrigued by the superpower right under our noses.

Category: Olfactory Art, Sociology

Han, B.-C. (2017) - The Scent of Time: A Philosophical Essay on the Art of Linger

In his philosophical reflections on the art of lingering, acclaimed cultural theorist Byung-Chul Han argues that the value we attach today to the *vita activa* is producing a crisis in our sense of time. Our attachment to the *vita activa* creates an imperative to work which degrades the human being into a labouring animal, an *animal laborans*. At the same time, the hyperactivity which characterizes our daily routines robs human beings of the capacity to linger and the faculty of contemplation. It therefore becomes impossible to experience time as fulfilling.

Drawing on a range of thinkers including Heidegger, Nietzsche and Arendt, Han argues that we can overcome this temporal crisis only by revitalizing the *vita contemplativa* and relearning the art of lingering. For what distinguishes humans from other animals is the capacity for reflection and contemplation, and when life regains this capacity, this art of lingering, it gains in time and space, in duration and vastness.

Category: Philosophy

Harad, A. (2012) - Coming to My Senses: A Story of Perfume, Pleasure, and an Unlikely Bride

A sudden love affair with fragrance leads to sensual awakening, self-transformation, and an unexpected homecoming

At thirty-six—earnest, bookish, terminally shopping averse—Alyssa Harad thinks she knows herself. Then one day she stumbles on a perfume review blog and, surprised by her seduction by such a girly extravagance, she reads in secret. But one trip to the mall and several dozen perfume samples later, she is happily obsessed with the seductive underworld of scent and the brilliant, quirky people she meets there. If only she could put off planning her wedding a little longer. . . .

Thus begins a life-changing journey that takes Harad from a private perfume laboratory in Austin, Texas, to the glamorous fragrance showrooms of New York City and a homecoming in Boise, Idaho, with the women who watched her grow up. With warmth and humor, Harad traces the way her unexpected passion helps her open new frontiers and reclaim traditions she had rejected. Full of lush description, this intimate memoir celebrates the many ways there are to come to our senses.

Category: Perfume, Fiction

Harvey, S.A. (2006) - Scenting Salvation: Ancient Christianity and the Olfactory Imagination

This book explores the role of bodily, sensory experience in early Christianity (first – seventh centuries AD) by focusing on the importance of smell in ancient Mediterranean culture. Following its legalization in the fourth century Roman Empire, Christianity cultivated a dramatically flourishing devotional piety, in which the bodily senses were utilized as crucial instruments of human-divine interaction. Rich olfactory practices developed as part of this shift, with lavish uses of incense, holy oils, and other sacred scents. At the same time, Christians showed profound interest in what smells could mean. How could the experience of smell be construed in revelatory terms? What specifically could it convey? How and what could be known through smell? *Scenting Salvation* argues that ancient Christians used olfactory experience for purposes of a distinctive religious epistemology: formulating knowledge of the divine in order to yield, in turn, a particular human identity.

Using a wide array of Pagan, Jewish, and Christian sources, Susan Ashbrook Harvey examines the ancient understanding of smell through religious rituals, liturgical practices, mystagogical commentaries, literary imagery, homiletic conventions; scientific, medical, and cosmological models; ascetic disciplines, theological discourse, and eschatological expectations. In the process, she argues for a richer appreciation of ancient notions of embodiment, and of the roles the body might serve in religion.

Category: History

Hawkes, C.H. (2002) - Disorders of Smell and Taste: The Most Common Complaints

This practical, brief guide to diagnosing and treating causes of disorders of smell and taste is the only accessible handbook available for non-experts. Signs of problems with these two senses may be ignored by the patient or downplayed by the physician, but the disruption of the senses may be a first sign of serious illness. The wide range of conditions responsible for disorders of smell and taste make it difficult to determine the single underlying cause and to decide upon the best possible plan of treatment. Disorders of Smell and Taste will help physicians manage some of these patients thereby minimizing references to specialists.

Category: Neurology, Disorders, Taste, Flavour

Hawkes, C.H., Doty, R.L. (2009) - The Neurology of Olfaction

Testing the sense of smell is often omitted or trivialized during neurological examination. This comprehensive review will address this shortcoming by emphasizing the significance of this important sensory modality. The Neurology of Olfaction describes the anatomy and physiology of human olfaction and how it may be measured. The book covers neurologic disorders in depth and a comprehensive chapter is devoted to neurodegenerative disorders, particularly Alzheimer's disease and Parkinson's disease, where loss of smell is frequent and may be an early preclinical feature that could predict the onset of disease in asymptomatic subjects. Finally, the authors describe methods of treatment for anosmia, evaluate its medicolegal importance, and give guidance for those unfortunate enough to have lost their sense of smell. Written by two experts in the field, this book provides information useful to physicians for assessing and managing chemosensory disorders and summarizes the current scientific knowledge of human olfaction.

Category: Neurology

Hawkes, C.H., Doty, R.L. (2018) - Smell and Taste Disorders

Loss of the sense of smell or taste is often a sign of neurological disease. Evaluating chemosensation (the senses of smell and taste) during neurological examination can help early detection of neurodegenerative conditions such as Parkinson's and Alzheimer's disease. The importance of such testing is now receiving increasingly high profile in the medical curriculum. In this book, olfactory conditions are completely updated and the sense of taste is now included in similar detail.

It is written by experts in the field, covering anatomy and physiology of human olfaction and taste, how they can be measured and their relevance to a wide range of major disorders such as diabetes, kidney disease, Alzheimer's and Parkinson's disease. The 'Olfactory Vector Hypothesis' that suggests a neuropathogen may enter the nose en route to the brain is evaluated in detail. This introduction to smell and taste disorders is an essential guide for neurologists, neurosurgeons, otolaryngologists, medical trainees, and chemosensory scientists.

Category: Neurology, Disorders, Taste, Flavour

Heinbockel, T. (2020) - Sino-Nasal and Olfactory System Disorders

Our sense of smell is of critical importance in our daily lives and it contributes to our personal wellbeing and safety as well as communication with others. However, it is only when disease or injury impairs its function that we appreciate the relevance of this sensory modality. During the past three decades, research of the olfactory sense has seen an ever-growing interest in this exciting field of study. This book provides the reader with an overview of the latest developments in sino-nasal and olfactory system disorders and focuses on the most important evidence-based developments in this area. This book addresses disorders, dysfunctions, diseases, and syndromes of the olfactory system ranging from molecular, cellular, and systems to cognitive and behavioral topics. Individual chapters center around recent advances in specific areas of chemosensory pathological conditions, while other chapters focus on technological developments to study the function and dysfunction of the olfactory pathways.

Category: Neurology, Disorders

Henshaw, V. (2013) - Urban Smellscapes: Understanding and Designing City Smell Environments

We see the city, we hear the city, but above all: we smell the city. Scent has unique qualities: ubiquity, persistence, and an unparalleled connection to memory, yet it has gone overlooked in discussions of sensory design. What scents shape the city? How does scent contribute to placemaking? How do we design smell environments in the city?

Urban Smellscapes makes a notable contribution towards the growing body of literature on the senses and design by providing some answers to these questions and contributing towards the wider research agenda regarding how people sensually experience urban environments. It is the first of its kind in examining the role of smell specifically in contemporary experiences and perceptions of English towns and cities, highlighting the perception of urban smellscapes as inter-related with place perception, and describing odour's contribution towards overall sense of place. Additionally, this book identifies processes by which urban smell environments are managed and controlled, also introducing tools to assist in designing urban smell environments, without reliance upon scenting practices alone.

Category: Olfactory Art

Henshaw, V., Mclean, K., Medway, D., Perkins, C., Warnaby, G. (2017) - Designing with Smell: Practices, Techniques and Challenges

Designing with Smell aims to inspire readers to actively consider smell in their work through the inclusion of case studies from around the world, highlighting the current use of smell in different cutting-edge design and artistic practices. This book provides practical guidance regarding different equipment, techniques, stages and challenges which might be encountered as part of this process.

Throughout the text there is an emphasis on spatial design in numerous forms and interpretations - in the street, the studio, the theatre or exhibition space, as well as the representation of spatial relationships with smell. Contributions, originate across different geographical areas, academic disciplines and professions. This is crucial reading for students, academics and practitioners working in olfactory design.

Category: Olfactory Art

Herman, B. (2013) - Scent and Subversion: Decoding a Century of Provocative Perfume

Perfume has been -- and continues to be -- subversive. By playing with gender conventions, highlighting the ripe smells of the human body, or celebrating queer and louche identities, 20th-century perfume broke free from the assumptions of the prior century, and became a largely unrecognized part of the social and style revolutions of the modern era.

In *Scent and Subversion: Decoding a Century of Provocative Perfume*, Barbara mc continues her irreverent, poetic, and often humorous analysis of vintage perfumes and perfume ads that she began on her popular blog YesterdaysPerfume.com. The book features descriptions of over 300 perfumes, starting with Fougère Royale (1882) and ending with Demeter's Laundromat (2000).

Lavishly illustrated with more than 100 vintage perfume ads, it will also regale you with essays on scent appreciation, a glossary of important perfume terms and ingredients, and tips on how to begin your own foray into vintage and contemporary perfume. Herman also looks to the future through interviews with scent visionaries such as odor expert and "professional provocateur" Sissel Tolaas, punk perfumer Antoine Lie, and Martynka Wawrzyniak, the artist behind "Smell Me," the world's first olfactory self-portrait.

The perfect book for perfume aficionados (aka "perfumistas") as well as connoisseurs of modern fashion and design, feminist and LGBTQ historians, and fans of vintage advertising.

Category: History

Herz, R. (2007) - The Scent of Desire: Discovering Our Enigmatic Sense of Smell

Shakespeare wrote that a rose by any other name would smell as sweet. But if you cannot smell, does the rose lose its sweetness?

The first and definitive book on the psychology of smell, *The Scent of Desire* traces the importance of smell in our lives, from nourishment to procreation to our relationships with the people closest to us and the world at large. Smell was the very first sense to evolve and is located in the same part of the brain that processes emotion, memory, and motivation. To our ancestors, the sense of smell wasn't just important, it was crucial to existence and it remains so today. Our emotional, physical, even sexual lives are profoundly shaped by both our reactions to and interpretations of different smells.

Why do some people like a certain smell and others hate it? Is smell personal or cultural? How does smell affect our choices and our daily lives? Rachel Herz explores these questions and examines the role smell plays in our lives, and how this most essential of senses is imperative to our physical and emotional well-being. Herz investigates how our sense of smell functions, examines what purpose it serves, and shows how inextricably it is linked to our survival. She introduces us to people who have lost their ability to smell and shows how their experiences confirm this sense's importance by illuminating the traumatic effect its loss has on the quality of day-to-day living. Herz illustrates how profoundly scent and the sense of smell affect our daily lives with numerous examples and personal accounts based on her years of research.

The wonders of our sense of smell are all explored in a compelling and engaging manner, from emotions and memory to aromatherapy and pheromones. For anyone who has ever wondered about human nature or been curious about the secrets of both the body and the mind, *The Scent of Desire* is a fascinating, down-to-earth tour of the psychology and biology of our most neglected sense, the sense of smell.

Category: Biology, Psychology, Sexuality

Herz, R. (2012) - That's Disgusting: Unraveling the Mysteries of Repulsion

Disgust originated to prevent us from eating poisonous food, but this simple safety mechanism has since evolved into a uniquely human emotion that dictates how we treat others, shapes our cultural norms, and even has implications for our mental and physical health. *That's Disgusting* illuminates the science behind disgust, tackling such colorful topics as cannibalism, humor, and pornography to address larger questions: Why do sources of disgust vary among people and societies? Where does disgust come from in our brain and what deeper fears does it reflect? How does disgust influence our individual personalities, our daily lives, and our values? It turns out that disgust underlies more than we realize, from political ideologies to the lure of horror movies. Drawing on surprising research in psychology and evolutionary biology, *That's Disgusting* shows us that disgust mirrors human nature and, as a result, is as complex and varied as we are.

Category: Sociology, History

Houston, A. (2021) - The Essentials of Aroma: Olfactory, Flavor and Fragrance (All Natural Perfumery, # 2)

You smell tasty!

In Volume 2 of All Natural Perfumery, Abigail Houston, teacher of perfume making, opens her notebook and shares what she's learned about fragrance creation. While the first book in the series focused on a basic understanding of how to create appealing formulas with essential oils, tinctures, and hydrosols, the second book focuses on the role of flavor in perfume making and exercises to enhance smelling abilities. It's everything olfactory and why you should care!

This guide includes 40-plus blends to practice your skills. These formulas include "smell-alike" recreations of brand name colognes and perfumes from Lancôme, Tommy Hilfiger, Ralph Lauren, Avon, Adidas, and Chanel—but these imitations use all natural ingredients instead of chemicals. Smell great, breathe easy, learn about aromas, and have fun!

Category: Perfume Making, Flavour, Taste

Horowitz, A. (2016) - Being a Dog: Following the Dog Into a World of Smell

To a dog, there is no such thing as "fresh air." Every breath of air is loaded with information. In fact, what every dog—the tracking dog, of course, but also the dog lying next to you, snoring, on the couch—knows about the world comes mostly through his nose.

In *Being a Dog*, Alexandra Horowitz, a research scientist in the field of dog cognition and the author of the runaway bestseller *Inside of a Dog*, unpacks the mystery of a dog's worldview as has never been done before.

With her family dogs, Finnegan and Upton, leading the way, Horowitz sets off on a quest to make sense of scents, combining a personal journey of smelling with a tour through the cutting edge and improbable science behind the olfactory powers of the dog. From revealing the spectacular biology of the dog snout, to speaking to other cognitive researchers and smell experts across the country, to visiting detection-dog training centers and even attempting to smell-train her own nose, Horowitz covers the topic of noses—both canine and human—from surprising, novel, and always fascinating angles.

As we come to understand how complex the world around us appears to the canine nose, Horowitz changes our perspective on dogs forever. Readers will finish this book feeling that they have smelled into a fourth dimension—breaking free of human constraints and understanding smell as never before; that they have, however fleetingly, been a dog.

Category: Animal Olfaction

Hsu, H.L. (2020) - The Smell of Risk: Environmental Disparities and Olfactory Aesthetics

A timely exploration of how odor seeps into structural inequality. Our sense of smell is a uniquely visceral—and personal—form of experience. As Hsuan L. Hsu points out, smell has long been spurned by Western aesthetics as a lesser sense for its qualities of subjectivity, volatility, and materiality. But it is these very qualities that make olfaction a vital tool for sensing and staging environmental risk and inequality. Unlike the other senses, smell extends across space and reaches into our bodies. Hsu traces how writers, artists, and activists have deployed these embodied, biochemical qualities of smell in their efforts to critique and reshape modernity's olfactory disparities.

The Smell of Risk outlines the many ways that our differentiated atmospheres unevenly distribute environmental risk. Reading everything from nineteenth-century detective fiction and naturalist novels to contemporary performance art and memoir, Hsu takes up modernity's differentiated atmospheres as a subject worth sniffing out. From the industrial revolution to current-day environmental crises, Hsu uses ecocriticism, geography, and critical race studies to, for example, explore Latinx communities exposed to freeway exhaust and pesticides, Asian diasporic artists' response to racialized discourse about Asiatic odors, and the devastation settler colonialism has reaped on Indigenous smellscapes. In each instance, Hsu demonstrates the violence that air maintenance, control, and conditioning enacts on the poor and the marginalized. From nineteenth-century miasma theory theory to the synthetic chemicals that pervade twenty-first century air, Hsu takes smell at face value to offer an evocative retelling of urbanization, public health, and environmental violence.

Category: Sociology

K

Kaiser, R. (1992) - The Scent of Orchids: Olfactory and Chemical Investigations

The aim of this book, the first of its kind, is to convey an impression of this enormous variety in scent and visual appearance of orchid flowers. The interdisciplinary concept of the beautifully illustrated book (over 170 colour photographs) should guarantee that a broad spectrum of readers will find this publication appealing: people engaged in the fragrance field, professional scientists, naturalists as well as hobbyists.

"This book takes the reader into the scented world of orchids (It contains an introduction to the world of orchids, a description of the orchids found on five continents and the chemistry of their aromas. (One of the unique features of this publication) is the way it has bridged the gap between the scientist and the lay person

The book is filled with beautiful color prints of more than 170 orchids, so that the variation and exotic nature of many orchids are readily understood. To not overburden the lay reader with the detailed chemical composition of each of the aromas of the 165 orchid species examined, the author has cleverly placed the data in an appendix. This makes the book easier to read without comprising the scientific contribution of the author's work.

Finally, here is a book of excellent value which will become the reference text on orchid aromas." - Brian M. Lawrence

Category: Chemistry

Kaiser, R. (2006) - Meaningful Scents Around the World: Olfactory, Chemical, Biological, and Cultural Considerations

In recent years, our knowledge of the anatomy and physiology of olfaction has grown enormously, accompanied by a growing appreciation of scent. This is reflected in the fact that the 2004 Nobel Prize in Medicine was awarded for discoveries of 'Odorant Receptors and the Organization of the Olfactory System'. This book naturally supports such developments, and takes the reader on a fascinating fragrant journey around the world to some of the exciting places the author has visited during his 30 years of olfactory research. Following an introductory section to the world of natural scents, including their biological meaning and history, the fragrance and flavor chemist, Roman Kaiser, who is renowned for his 'headspace' analytical technique, revisits some memorable scents. In doing so, he leads us to such exotic places as Lower Amazonia, Papua New Guinea, India, and many rain-forest biotopes in his quest for new molecules and new scent concepts, showing us along the way how a scent like tatami can be linked to culture. The third and final section describes the analysis of the compositions of the presented scents.

Category: Chemistry

Kaiser, R. (2011) - Scent of the Vanishing Flora

Inspired by Dougal Stermer's book 'Vanishing Flora', Roman Kaiser worked for more than ten years on collecting the scent of 267 endangered plant species worldwide. In the present volume, he invites us to a journey along the hotspots of biodiversity, all of them bearing endangered species, and discusses their scents. This compilation renders the book an important contribution to the UN International Year of Biodiversity.

Category: Chemistry

Keller, A. (2017) - Philosophy of Olfactory Perception

This book reconsiders the major current topics in the philosophy of perception using olfaction as the paradigm sense. The author reveals how many of the most basic concepts of philosophy of perception are based on peculiarities of visual perception not found in other modalities, and addresses how different the philosophy of perception would be if based on olfaction.

he book addresses several aspects of olfaction, including perceptual qualities, percepts, olfaction and cognitive processes, and consciousness.

The first part of the book considers perception with respect to its ability to guide behaviors and to make information available to cognitive processes. The author continues by addressing the differences between conscious and non-conscious olfactory perception, and presents an argument for an important role of attention in conscious processes. The book concludes by discussing the function of conscious brain processes and their link to guiding behaviors in complex situations.

Category: Philosophy

Kemp, C. (2012) - Floating Gold: A Natural (and Unnatural) History of Ambergris

“Preternaturally hardened whale dung” is not the first image that comes to mind when we think of perfume, otherwise a symbol of glamour and allure. But the key ingredient that makes the sophisticated scent linger on the skin is precisely this bizarre digestive by-product—ambergris. Despite being one of the world’s most expensive substances (its value is nearly that of gold and has at times in history been triple it), ambergris is also one of the world’s least known. But with this unusual and highly alluring book, Christopher Kemp promises to change that by uncovering the unique history of ambergris.

A rare secretion produced only by sperm whales, which have a fondness for squid but an inability to digest their beaks, ambergris is expelled at sea and floats on ocean currents for years, slowly transforming, before it sometimes washes ashore looking like a nondescript waxy pebble. It can appear almost anywhere but is found so rarely it might as well appear nowhere. Kemp’s journey begins with an encounter on a New Zealand beach with a giant lump of faux ambergris—determined after much excitement to simply be lard—that inspires a comprehensive quest to seek out ambergris and its story. He takes us from the wild, rocky New Zealand coastline to Stewart Island, a remote, windswept island in the southern seas, to Boston and Cape Cod, and back again. Along the way, he tracks down the secretive collectors and traders who populate the clandestine modern-day ambergris trade.

Floating Gold is an entertaining and lively history that covers not only these precious gray lumps and those who covet them, but presents a highly informative account of the natural history of whales, squid, ocean ecology, and even a history of the perfume industry. Kemp’s obsessive curiosity is infectious, and eager readers will feel as though they have stumbled upon a precious bounty of this intriguing substance.

Category: Natural History

Kennett, F. (1975) - History Of Perfume

The liner notes claim this 208 paged hardcover book to be the “most complete survey of this art, and its place in society, politics and science since Eugene Rimmel’s classic work on the subject in 1894”. In fact the “Book of Perfumes” 1865 published in 1865 was a classic of its time, beautifully illustrated with line drawings. Kennett’s book comes with 10 illustrated plates, the first intriguingly of an Indian perfume-distiller, and also with 7 poems variously gleaned from Indian, Persian, Greek and French classics.

Category: History

Kiechle, M.A., Sutter, P.S. (2017) - Smell Detectives: An Olfactory History of Nineteenth-Century Urban America

What did nineteenth-century cities smell like? And how did odors matter in the formation of a modern environmental consciousness? *Smell Detectives* follows the nineteenth-century Americans who used their noses to make sense of the sanitary challenges caused by rapid urban and industrial growth. Melanie Kiechle examines nuisance complaints, medical writings, domestic advice, and myriad discussions of what constituted fresh air, and argues that nineteenth-century city dwellers, anxious about the air they breathed, attempted to create healthier cities by detecting and then mitigating the most menacing odors.

Medical theories in the nineteenth century assumed that foul odors caused disease and that overcrowded cities filled with new and stronger stinks were synonymous with disease and danger. But the sources of offending odors proved difficult to pinpoint. The creation of city health boards introduced new conflicts between complaining citizens and the officials in charge of the air. *Smell Detectives* looks at the relationship between the construction of scientific expertise, on the one hand, and common sense, the olfactory experiences of common people on the other. Although the rise of germ theory revolutionized medical knowledge and ultimately undid this form of sensory knowing, *Smell Detectives* recovers how city residents used their sense of smell and their health concerns about foul odors to understand, adjust to, and fight against urban environmental changes.

Category: History, Sociology

Kimmelman, C.P. - Disorders of Taste and Smell

(ISBN13: 9781567720242)

Category: Disorders, Medical

L

Le Collectif Nez, Dore, J. - Nez, The Olfactory Magazine

Published bi-annually, *Nez* explores the world around us via our sense of smell. Available in both French and English, *Nez* provides an insight into the vital role that olfactory sensations play in our lives in a novel approach that encompasses art, literature, science, history, food and perfume.

<https://www.nez-editions.us/collections/the-olfactory-magazine>

Category: General

Leeb, C. (2008) - From Nose to Brain: Differentiation Factors and their Role in Olfactory Neurogenesis

In the past decade the dogma that we are born with a certain number of nerve cells and that the brain is incapable of generating new neurons and renewing itself has been proven incorrect. There is a renewal process in the adult brain, called neurogenesis, facilitated by the presence of neuronal stem cells. The capacity of olfactory receptor neurons to regenerate from a pool of multipotent stem cells highlights the olfactory neuroepithelium as an important source of adult neuronal stem cells. The olfactory stem cell has the undeniable advantage that it can be easily used for autologous transplantation to avoid graft versus host reactions.

Once this is achieved new promising therapeutic venues for the treatment of various neurological diseases can be put into practice. While the regenerative capacity of the olfactory neuroepithelium has been well studied less is known about the molecular events controlling adult olfactory stem cell activity. Therefore this book sheds light on the isolation and characterisation of adult olfactory stem cells as well as molecular mechanisms involved in olfactory stem cell proliferation and differentiation.

Category: Neurology

Levent, N., Pascual-Leone, A., (2014) - The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory, and Space

Recent research in the cognitive sciences gives us a new perspective on the cognitive and sensory landscape. In *The Multisensory Museum: Cross-Disciplinary Perspectives on Touch, Sound, Smell, Memory, and Space*, museum expert Nina Levent and Alvaro Pascual-Leone, professor of neurology at Harvard Medical School bring together scholars and museum practitioners from around the world to highlight new trends and untapped opportunities for using such modalities as scent, sound, and touch in museums to offer more immersive experiences and diverse sensory engagement for visually- and otherwise-impaired patrons.

Visitor studies describe how different personal and group identities color our cultural consumption and might serve as a compass on museum journeys. Psychologists and educators look at the creation of memories through different types of sensory engagement with objects, and how these memories in turn affect our next cultural experience.

An anthropological perspective on the history of our multisensory engagement with ritual and art objects, especially in cultures that did not privilege sight over other senses, allows us a glimpse of what museums might become in the future. Education researchers discover museums as unique educational playgrounds that allow for a variety of learning styles, active and passive exploration, and participatory learning.

Designers and architects suggest a framework for thinking about design solutions for a museum environment that invites an intuitive, multisensory and flexible exploration, as well as minimizes physical hurdles. While attention has been paid to accessibility for the physically-impaired since passage of the Americans with Disabilities Act, making buildings accessible is only the first small step in elevating museums to be centers of learning and culture for all members of their communities. This landmark book will help all museums go much further.

Category: Olfactory Art

Lindqvist, A. (2013) - Perfumes between Venus and Mars : how gender categorization of perfumes is (not) related to odor perception and odor preference

ISBN13 9789174476453

Category: Perfumes, Sociology, Sexuality

Long, T.S., (2001) - Compendium of Olfactory Research Supplement 1995-2000
Published 2001 by Kendall/Hunt Publishing Company - (ISBN13: 9780787283865)

Category: *General*

Lycan, William G. "The Slighting of Smell (with a Brief Word on the Slighting of Chemistry)." In *Of Minds and Molecules: New Philosophical Perspectives on Chemistry*. Edited by Nalini Bhushan and Stuart Rosenfeld, 273–290. New York: Oxford University Press, 2000.

A must-read for anyone new to philosophical work on olfaction. Lycan argues that if we had started with olfaction as opposed to vision, the history of theorizing about perception would have taken a different path. In arriving at this conclusion, he considers a set of "general respects of similarity and difference between the senses" (p. 277) and argues that, with respect to each, olfaction diverges significantly from vision. - (Batty 2022, <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-biblitem-0007>)

Category: *Chemistry, Philosophy*

Lynn, G., Riley Parr, D (2021) - Olfactory Art and the Political in an Age of Resistance

This book claims a political value for olfactory artworks by situating them squarely in the contemporary moment of various forms of political resistance.

Each chapter presents the current research and art practices of an international group of artists and writers from the United States, Canada, France, Germany, Switzerland, Thailand, Sweden, and the Netherlands. The book brings together new thinking on the potential for olfactory art to critique and produce modes of engagement that challenge the still-powerful hegemonic realities of the twenty-first century, particularly the dominance of vision as opposed to other sensory modalities.

The book will be of interest to scholars working in contemporary art, art history, visual culture, olfactory studies, performance studies, and politics of activism.

Category: *Sociology*

Lyttelton, C. (2007) - The Scent Trail: A Journey of the Senses

When Celia Lyttelton visited a bespoke perfumers, she realized a long-held ambition: to have a scent created solely for her. Entering this heady, exotic world of oils and essences, she was transported from a leafy London square to a place of long-forgotten memories and sensory experiences. And once drawn into this world, she felt compelled to trace the origins, history and culture of the many ingredients that made up her unique perfume...

Category: *History, Perfume Making*

M

Malone, J. (2015) - My Story

Known around the world for her eponymous brand of fragrances and now her brand-new venture Jo Loves (soon to debut in the US), Jo Malone tells the remarkable and inspiring story of her rise from humble beginnings to beloved business success.

Jo Malone began her international fragrance and scented candle business in 1983 from her kitchen, where she made bath oils as thank-you gifts for her facial clients. She opened her first store in London in 1994, and in 1999 she sold the Jo Malone London brand to Estee Lauder Companies. Recently, she launched a new brand, Jo Loves, igniting the excitement of fashion and beauty converts all over the world. Raised in government-subsidized housing in Kent in the early 1960s, Jo Malone left school as a teenager to care for her mother after she had a stroke. Jo had not been successful in school because of her dyslexia, but she had the ability to see and feel everything in scent. Her at-home beauty business and hand-made products became popular, and word of her talent spread until an international brand was born. After the sale of her company and the birth of her son, she was diagnosed with breast cancer and underwent treatment in New York. Thus began the second chapter of her life, and in this memoir, Jo tells her full amazing and inspiring personal story.

Category: Perfume

Marchetti, S., Le Guéner, A. (2018) - Perfume According to Bulgari

This stunning luxury book--a kind of precious atlas of fragrances--traces the origins of Bulgari's precious perfumes back to the ancient gems and spice trails and to Bulgari's fine jewelry tradition, which is deeply rooted in Roman tradition. The fragrance range Le Gemme, developed by the greatest international master perfumers, is an expression of the DNA of the company and, like Bulgari jewels and watches, are worn by men and women who recognize the exclusive, refined, and colorful world of the Roman dolce vita lifestyle. Bulgari's muses have always been, and still are today, the most elegant women on the planet; noblewomen, princesses, actresses, and singers: from Sophia Loren to Liz Taylor, from Claudia Cardinale to Anna Magnani, from Sharon Stone to Nicole Kidman and Carla Bruni.

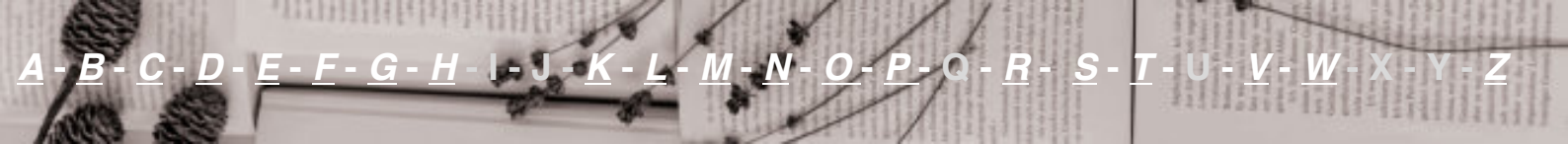
An exclusive journey into the world of colors, jewelry, and fragrances, this elegant book tells a story that intertwines colored gems, precious essences, and the contemporary alchemies of the most famous "noses" in the world.

Category: Perfume

Malle, F., Ellena, J.C., Vignal, M. (2020) - Editions de parfums Frédéric Malle: The First Twenty Years

Parfumeur Frédéric Malle was born into the world of fragrance; his grandfather Serge Heftler-Louiche founded Dior Parfums before passing on its art direction to his daughter. Malle's deep knowledge of scents and his radical vision of perfumes led him to establish Éditions de Parfums Frédéric Malle, a house for perfumers where fragrances are conceived as haute couture creations.

This volume marks the twentieth anniversary of Frédéric Malle Malle's quest for beauty and creative freedom.



Journalist Marion Vignal delves into Malle's lifelong devotion to perfume, personal history, and myriad inspirations to uncover the evolution of his precise olfactory aesthetics, while imagery of perfume bottles, sketches, advertising campaigns, and photos of boutiques explores his comprehensive vision. Malle offers readers an intimate glimpse into his brand's saga and shares the stories behind four of his most successful scents in graphic-novel form. A necessary addition to the libraries of industry masters, this volume is an invitation to a sensorial journey that will delight perfume lovers everywhere.

Category: Perfume

Margolis, F.L., Getchell, T.V. (1988) - Molecular Neurobiology of the Olfactory System: Molecular, Membranous, and Cytological Studies

The sense of smell and the olfactory system have been a subject of intrinsic interest for millenia. Inquiry into the structure and function of the olfactory system is based on a long tradition that dates back at least to the ancient Greeks. The mechanistic basis for the sensitivity and selectivity of this chemosensory detection system has always posed a challenge and remained largely a mystery. Recently, there has been a renaissance of interest in it and especially in the application of contemporary techniques of biochemistry and cellular and molecular biology. In this volume, current research utilizing these approaches is discussed in depth by a group of scientists who are among the current leaders in the applications of these techniques to the olfactory system.

These authors address a wide range of questions that bear directly on the olfactory system but have broader biological implications as well. The various chapters have been grouped into five broad subject areas that emphasize diverse but related questions. "Transduction and Ligand-Receptor Interactions" considers the biochemical bases of stimulus access, interaction, transduction, elimination, and information processing.

Category: Neurobiology

Mayer Lefkowitz, C. (1998) - The Art of Perfume: Discovering and Collecting Perfume Bottles

Comprising a detailed chronological history of the perfume bottle from around 1850 to 1950, this book contains photographs of some of the most striking designs created in those years, highlighting details of their craftsmanship. The text outlines the historical and social background to their creation, and an A-Z reference section lists over 500 major perfumers, designers and glassmakers.

Category: Perfume

Mayer Lefkowitz, C. (2002) - Masterpieces of the Perfume Industry

Written by an acknowledged authority on the subject, this book presents a comprehensive photographic and historical review of over 150 years of creativity, showing almost 1,300 objects produced for the perfume industry during the 19th and 20th centuries.

Category: Perfume

Mazzeo, T.J. (2010) *The Secret of Chanel No. 5: The Intimate History of the World's Most Famous Perfume*

Tilar J. Mazzeo returns with a captivating history of the world's most famous, seductive, and popular perfume: Chanel No. 5. Mazzeo's sweeping story of the iconic scent (known as "le monstre" in the fragrance industry) stretches from Coco Chanel's early success to the rise of the seminal fragrance during the 1950s to the confirmation of its bestseller status in today's crowded perfume market.

Category: Perfume

McCartney, S., Scriven, S. (2021) - *The Perfume Companion: The Definitive Guide to Choosing Your Next Scent*

The Perfume Companion is a beautifully illustrated compendium of almost 500 recommended scents, designed to help you pick out your next favourite fragrance.

Perfumes have the power to evoke treasured memories, make us feel fabulous and help us express our best self. But with so many out there, how do you choose something new? When the scents in the perfume shop are merging into one aromatic haze, how do you remain focused? And if your favourite scent goes out of stock, how do you replace it? *The Perfume Companion* is here to help. Sarah McCartney and Samantha Scriven deliver a host of scents for you to try – including bargain finds and luxury treasures, iconic stalwarts and indie newcomers, the lightest florals and the deepest leathers.

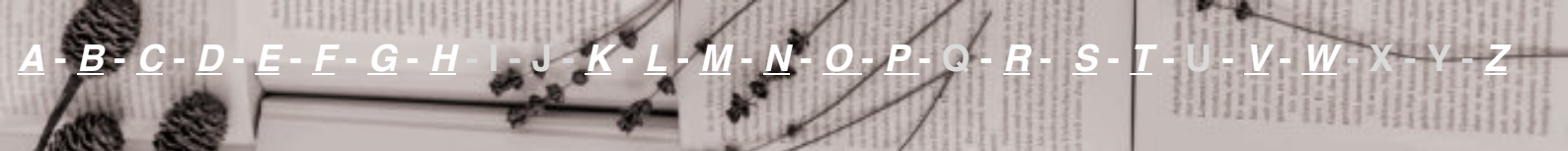
With insider information about how perfumes are really made, discover hundreds of new fragrances and find the scents to share your own memories with. This is the perfect companion for your scented adventures.

Category: Perfume

McGee, H. (2020) - *Nose Dive: A Field Guide to the World's Smells*

The ultimate guide to the smells of the universe - the ambrosial to the malodorous, and everything in between - from the author of the acclaimed culinary guides *On Food and Cooking* and *Keys to Good Cooking*

From Harold McGee, James Beard Award-winning author and leading expert on the science of food and cooking, comes an extensive exploration of the awe-inspiring world of smell. In *Nose Dive*, McGee takes us on a sensory-filled adventure, from the sulfurous nascent earth more than four billion years ago, to the sweetly fragrant Tian Shan mountain range north of the Himalayas, to the keyboard of your laptop, where trace notes of formaldehyde escape between the keys. We'll sniff the ordinary (wet pavement and cut grass) and extraordinary (fresh bread and chocolate), the delightful (roses and vanilla) and the unpleasant (spoiled meat and rotten eggs). We'll smell each other. We'll smell ourselves.



Through it all, McGee familiarizes us with the actual bits of matter that we breathe in -- the molecules that trigger our perceptions, that prompt the citrusy smells of coriander and beer and the medicinal smells of daffodils and sea urchins. And like everything in the physical world, molecules have histories. Many of the molecules that we smell every day existed long before any creature was around to smell them -- before there was even a planet for those creatures to live on. Beginning with the origins of those molecules in interstellar space, McGee moves onward through the smells of our planet, the air and the oceans, the forest and the meadows and the city, all the way to the smells of incense, perfume, wine, and food.

Here is a story of the world, of all of the smells under our collective nose. A work of astounding scholarship and originality, *Nose Dive* distills the science behind the smells and translates it, as only McGee can, into an accessible and entertaining guide. Incorporating the latest insights of biology and chemistry, and interwoven with personal observations, McGee reveals how our sense of smell has the power to expose invisible, intangible details of our material world and life, and trigger in us feelings that are the very essence of being alive.

Category: General

McHugh, J.M. (2012) - Sandalwood and Carrion: Smell in Indian Religion and Culture

James McHugh offers the first comprehensive examination of the concepts and practices related to smell in pre-modern India. Drawing on a wide range of textual sources, from poetry to medical texts, he shows the significant religious and cultural role of smell in India throughout the first millennium CE.

McHugh describes the arts of perfumery developed in royal courts, temples, and monasteries, which were connected to a trade in exotic aromatics. Through their transformative nature, perfumes played an important part in every aspect of Indian life from seduction to diplomacy and religion. The aesthetics of smell dictated many of the materials, practices, and ceremonies associated with India's religious culture.

McHugh shows how religious discourses on the purpose of life emphasized the pleasures of the senses, including olfactory experience, as valid ends in themselves. Fragrances and stench were analogous to certain values, aesthetic or ethical, and in a system where karmic results often had a sensory impact-where evil literally stank-the ethical and aesthetic became difficult to distinguish. Through the study of smell, McHugh strengthens our understanding of the vital connection between the theological and the physical world.

Sandalwood and Carrion explores smell in pre-modern India from many perspectives, covering such topics as philosophical accounts of smell perception, odors in literature, the history of perfumery in India, the significance of sandalwood in Buddhism, and the divine offering of perfume to the gods.

Category: Sociology, History

McIndoo, N.E. (2019) - The Olfactory Sense of Insects

Excerpt from The Olfactory Sense of Insects

Paasch (1873) claims that no nerves coming from the brain lead to the trachea and that the Olfactory organ need not necessarily be connected with the breathing apparatus. He reasons that its location should correspond with that found in higher animals. He found a peculiar plate situated between the eyes and beneath the antenna and extending to the base of the proboscis. This plate possesses a groove whose edges are beset with stiff bristles, and many tracheal branches; it also has nerve connections. This he regards as the Olfactory organ. This plate does not exist in the honey bee.

Category: Animal Olfaction

Miller, J.H. (2006) - Perfume Bottles

Over 400 exquisite designs-from streamlined Modernist creations to rare design classics and quirky novelty items. Also, iconic bottles from leading makers such as Chanel, Guerlain, Schiaparelli, and Jean-Paul Gaultier can be found in this new title from DK. This is the perfect pocket guide to buying, valuing, and collecting; created by international antiques expert Judith Miller.

A star-rating system indicates the value of every item

*Includes modernist creations, rare design classics, and quirky novelty items

*Special features on influential designers and makers, and especially desired pieces.

Category: Perfume

Montessori Support (2017) - Olfactory Bottles Guide: When, why and how to present Montessori material (Sensorial material)

Olfactory Bottles are a part of the Montessori Material supporting child's development, especially the olfactory sense.

Montessori-Support's guides are composed of:

- A full, detailed and illustrated technical sheet allowing you to learn about the characteristics of the material and when/how/why present it to the child.
- A "recap" file" helping you to quickly remember the steps of presentation with drawings, when you are busy in the class with children per example.

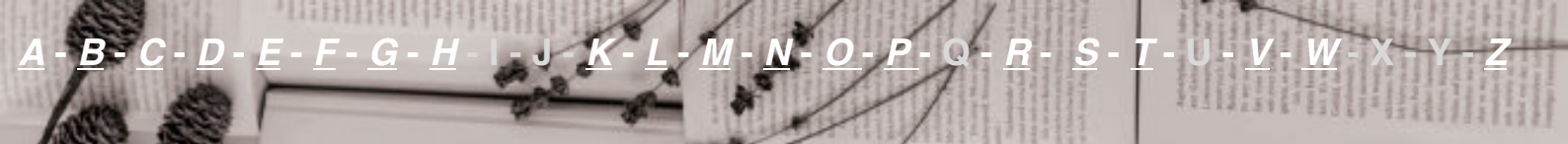
A.M.I. certified teachers create Montessori-Support methodological guides.

Category: Perfume

Mori, K. (2014) - The Olfactory System: From Odor Molecules to Motivational Behaviors

This book surveys progress in understanding the mammalian and fish olfactory system, covering neurobiological mechanisms involved in the function of the associated neuronal circuits. Explores the logic that translates odor information into behavioral response.

Category: Neurology



Morris, E.T. (1999) - Scents of Time: Perfume from Ancient Egypt to the 21st Century

(ISBN13: 9783791322179)

Category: History

Muchembled, R. (2017) - Smells: A Cultural History of Odours in Early Modern Times

In this book Robert Muchembled restores smell to its rightful place as one of our most important senses and examines the transformation of smells in the West from the Renaissance to the beginning of the 19th century. He shows that in earlier centuries, the air in towns and cities was often saturated with nauseating emissions and dangerous pollution. Having little choice but to see and smell faeces and urine on a daily basis, people showed little revulsion; until the 1620s, literature and poetry delighted in excreta which now disgust us.. At the same time, medicine explained outbreaks of plague by Satan's poisonous breath corrupting the air. Amber, musk and civet came to be seen as vital bulwarks against the devil's breath: scents were worn like armour against the plague. The disappearance of the plague after 1720 and the sharp decline in fear of the devil meant there was no longer any point in using perfumes to fight the forces of evil, paving the way for the olfactory revolution of the 18th century when softer, sweeter perfumes came into fashion, reflecting new norms of femininity and a gentler vision of nature.

Category: History, Sociology

N

Nakomoto, T. (2012) - Human Olfactory Displays and Interfaces: Odor Sensing and Presentation

Although good devices exist for presenting visual and auditory sensations, there has yet to be a device for presenting olfactory stimulus. Nevertheless, the area for smell presentation continues to evolve and smell presentation in multimedia is not unlikely in the future. Human Olfactory Displays and Interfaces: Odor Sensing and Presentation provides the opportunity to learn about olfactory displays and its odor reproduction. Covering the fundamental and latest research of sensors and sensing systems as well as presentation technique, this book is vital for researchers, students, and practitioners gaining knowledge in the fields of consumer electronics, communications, virtual realities, electronic instruments, and more.

Category: Sensors

Nielsen, B.L. (2017) - Olfaction in Animal Behaviour and Welfare

Evidence-based, yet entirely practical, this important new text builds upon the basics of neuroscience to describe the link between olfaction, animal behavior, and the importance of odors for animal welfare.

Focusing on animals managed by humans, and taking animal behavior as the starting point, the book is written in a straightforward style and features illustrated examples from many different species with in-depth research from acknowledged experts in the area.

From the scientific basis of olfaction and odor perception, the text covers pheromones, odorant learning, and behavioral tests before describing the role of olfaction in, for example, fear, foraging, and reproduction, and olfactory behavior in farm animals, zoo animals, laboratory animals, and companion animals.

Category: Animal Olfaction

O

Ohloff, G., Pickenhagen, W., Kraft, P. (2012) - Scent and Chemistry: The Molecular World of Odors

This book is the long awaited completely revised and extended edition of Gunther Ohloff's standard work "Scent and Fragrances: The Fascination of Odors and Their Chemical Perspectives." The prominent chemists Gunther Ohloff, Wilhelm Pickenhagen, and Philip Kraft convey the scientist, the perfumer, as well as the interested layman with a vivid and up-to-date picture of the state of the art of the chemistry of odorants and the research in odor perception. The book details on the molecular basis of olfaction, olfactory characterization of perfumery materials, structure-odor relationships, the chemical synthesis of odorants, and the chemistry of essential oils and odorants from the animal kingdom, backed up by ca. 400 perfumery examples and historical aspects.

It will serve as a thorough introductory text for all those interested in the molecular world of odors.

This book is written for everyone who wants to know more about the molecular basis of odor, and the relationships between chemical structures and olfactory properties. The great structural diversity of odorants, their synthesis, natural occurrence and their structure odor correlation demonstrate what a fascinating science Fragrance Chemistry indeed is.

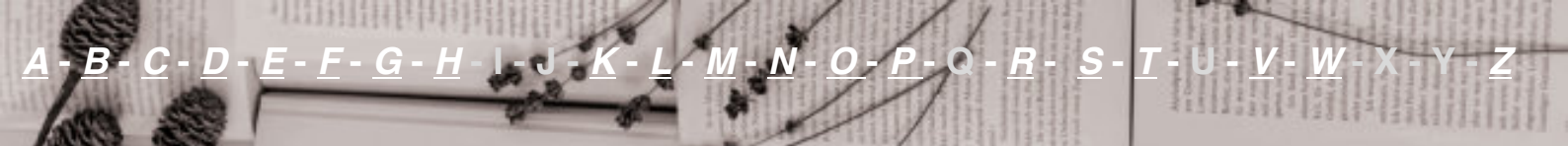
Category: Chemistry, Perfume Making

Oppenheim, G. (2021) - The Ghost Perfumer: Creed, Lies, & the Scent of the Century

This is the story of a genius and a fraud. For more than half a century, Olivier Creed, heir to a French fashion empire but out to conquer an adjacent field by himself, created the most compelling and costly perfumes in the world – scents so successful – artistically and commercially – that the world's largest asset manager bought his small olfactory enterprise for nearly \$1 billion in 2020.

One could arguably have called him the world's most capable perfumer. Except Olivier Creed never authored the scents for which he has long received acclaim and lucre. Gabe Oppenheim reveals the heretofore untold story behind this supposed-cologne colossus of a man – and the eponymous company that became a social media sensation:

That scents were authored by someone else entirely – a brilliant ghostwriter – a hidden, scholarly figure with a great passion for Proust and an unfortunate tendency to doubt the quality of his own compositions.



How these two figures met and the arrangement was struck – how they circled each other warily for the next 40 years – how lies, told often enough, became truths – Gabe Oppenheim examines as he journeys into the heart of an industry mystifying and fanciful, enormous and intimate, sensuous and yet so-damn-insubstantial.

It's an expedition that takes him to a Creed shop in Dubai and the castle in Normandy where the Ghost resides, having left behind a Parisian world that, in some sense, never acknowledged him. And yet, he's a legend in a certain section of the scented demimonde for a few achievements so innovative he wouldn't yield them even to a charismatic manipulator. Oppenheim explores issues of attribution and artistry, credit and craftsmanship, ingenuity and disingenuousness. "The Ghost Perfumer" is the story of a genius and a fraud.

Category: Perfume

Ostrom, L. (2015) - Perfume: A Century of Scents

The incredible stories of 100 perfumes from a whole century of scents.

With brilliantly exuberant style, perfume expert Lizzie Ostrom dives into a world of fragrance, introducing us to signature scents; now-lost masterpieces; and potent perfumes from across the decades. She reveals the wild and wonderful launch campaigns; the visionaries behind these mysterious concoctions; and the loyal fans of these little bottles of delight, who sprayed them in abundance.

Category: Perfume, History

P

Pauwels, M., Itin, P., Rogiers, V. (2008) - Safety Assessment of Cosmetics in Europe

Category: Chemistry

Parsons Schaeffer, J. (2016) - The Nose, Paranasal Sinuses, Nasolacrimal Passageways, and Olfactory Organ in Man: A Genetic, Developmental, and Anatomico-Physiological Consideration

This work has been selected by scholars as being culturally important, and is part of the knowledge base of civilization as we know it. This work was reproduced from the original artifact, and remains as true to the original work as possible. Therefore, you will see the original copyright references, library stamps (as most of these works have been housed in our most important libraries around the world), and other notations in the work.

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Pfaffman, C. (1968) - Olfaction And Taste; Proceedings by the International Symposium of Olfaction and Taste - Rockefeller University

Category: Taste, Flavour

Picimbon, J.F. (2019) - Olfactory Concepts of Insect Control - Alternative to Insecticides: Volume 2

Evolution gave rise to a prominent insect diversity at every level of ecological niche. Since then, hordes of insects have threatened human and cattle health as well as most of all green lands and agricultural crops. Now, the insect problem expands from many mutant forms of yellow dengue fever mosquitoes to highly-resistant larvae of most all various phytophageous species. The tremendous expansion of insects is due not only to an increasing resistance capacity to insecticides, but also to a strong capacity for adapting to different climate and environmental changes, including global warming.

Obviously insects display a number of rudimentary systems to build an extremely efficient organism to survive in a changing world. In many species, one pheromone molecule is enough to trigger mating behavior. Therefore, insects have become crucial models not only for evolutionary studies, but also for understanding specific mechanisms underlying sensory-based behaviors. Most of insect species such as ants, beetles, cockroaches, locusts, moths and mosquitoes largely rely on olfactory cues to explore the environment and find con-specifics or food sources.

A conglomerate of renowned international scientific experts is gathered to expose the insect problem on the various continents of the planet and propose an alternative to the use of toxic insecticides. Sex pheromones, specific chemical signals necessary for reproduction, and pheromone detection in insects are described with full details of the olfactory mechanisms in the antennae and higher centers in the brain. Thus, new synthetic pheromones and/or plant odors with specific molecular target sites in the insect olfactory system are proposed for sustainable development in agricultural and entomological industries. Disrupting insect pheromone channels and plant odor detection mechanisms is solemnly envisioned as a unique way to control invasive insect pest species while preserving human and environment safety.

Category: Animal Olfaction

Proust, M. - In Search of Lost Time

Proust's Magnum Opus and the source of the infamous scene of the Madeleine.

Category: Literature, Fiction

Powell, E.A.I. (2020) - Atomizer

"The French philosopher Alain Badiou has described a moment of contemporary crisis in which love is threatened by commercialization, as dating sites and advertising campaigns work to rob human encounters of their chance and feeling. In "Atomizer," Elizabeth A. I. Powell examines love in its current contexts, asking if it is even appropriate to write about love in a time heading toward fascism.

Category: Philosophy

R

Rhind, J.P. (2014) - Listening to Scent: An Olfactory Journey with Aromatic Plants and Their Extracts

The olfactory journey described in this book introduces readers to the pleasures and benefits of educating and training the 'nose', our olfactory palate. Jennifer Peace Rhind explores the process of cultivating our sense of smell and demonstrates how the process itself can be therapeutic and enjoyable, as well as informative.

She highlights the different skills involved, from olfactory vocabulary, awareness, and memory, through to discrimination and fragrance creation, and the activities that can help to acquire them, emphasizing the value of experiential learning. She describes the Japanese art of koh-do or the 'way of incense' and suggests ways of creating group events inspired by this. Based on her twenty five years' experience working with essential oils and aromatic plant extracts, she also leads the reader through a variety of scent families, with information on the botanical source, odour profiles, olfactory notes, and suggestions for comparison with other scents.

This method of educating and training the 'nose' is fascinating, challenging and life-enhancing and will be of interest to anyone eager to develop their sense of smell, and of incalculable use to aromatherapy students and practitioners who must acquire these skills for their career.

Category: Biology, Memory

Rimmel, E. - The Book of Perfumes

(ISBN13: 9781494161972)

Category: Perfume

Rindisbacher, H.J. (1993) - The Smell of Books: A Cultural-Historical Study of Olfactory Perception in Literature

Demonstrates that sense of smell plays a significant role in the history of European literature

Category: History, Sociology

Rouby, C. (2002) - Olfaction, Taste and Cognition

This volume presents a multidisciplinary synthesis of the literature in olfactory and gustatory cognition. Leading experts have written chapters on many facets of taste and smell, including odor memory, cortical representations, psychophysics and functional imaging studies, genetic variation in taste, and the hedonistic dimensions of odors. The approach is integrative, combining perspectives from neuroscience, psychology, anthropology, philosophy, and linguistics, and is appropriate for students and researchers in all of these areas who seek an authoritative reference on olfaction, taste, and cognition.

Category: Neurology, Memory, Psychology, Philosophy

Rouby, Catherine, Benoist Schaal, Danièle Dubois, Rémi Gervais, and André Holley, eds. *Olfaction, Taste and Cognition*. Cambridge, UK: Cambridge University Press, 2002.

This volume contains a collection of papers that aim to approach issues of the chemical senses and cognition from an interdisciplinary perspective. It is more technical than [Drobnick 2006](#) but provides a nice example of how interdisciplinary theorizing about olfaction can be organized and undertaken. (Batty, 2022, <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0333.xml#obo-9780195396577-0333-biblItem-0007>)

Category: Taste, Neurology, Flavour, Interdisciplinary

Roudnitska, E. (1980) - Le parfum

Les parfums répondent aux modes, sont le reflet d'une époque, la transcendent parfois. Ils sont aussi affaire de chimie, de marketing, de processus de fabrication et de commercialisation. Ils doivent respecter des normes de sécurité de plus en plus précises. Ils représentent un marché international de plusieurs milliards d'euros. Ils sont surtout affaire de création.

À partir d'une palette de matières odorantes, Jean-Claude Ellena raconte comment fonctionne l'odorat et comment se compose un parfum. Il nous livre sa manière unique de créer une fragrance, de jouer avec nos souvenirs olfactifs pour rendre le parfum séducteur.

Category: Parfum

Roudnitska, E. (2018) - A life of Perfume

A Collection of essays and material by the master of perfumery Edmond Roudnitska. Includes material translated from French and previously unpublished in the english Language. Includes an appreciation by Jean Claude Ellena.

Category: Parfum

S

Salazar, I. , Chamero, P. (2015) - Olfactory Subsystems in Mammals: Morphology, Genetic and Evolution

Category: General

Schmeisser, E., Toppert, K.(2013) - Olfaction Warfare: Odor as Sword and Shield

The use of vision and audition in stealth applications is well recognized; however, other perceptual senses can also play a valuable role. This report discusses the sense of smell (olfaction), its use in nature and everyday life, and its potential applications in military and stealth operations. The sense of smell has largely been overlooked and underutilized in warfare, being restricted to crowd control and deterrent applications. However, the olfactory dimension can be a promising addition to other Department of Defense applications, such as stealth operations, deception, misdirection, and force projection. Further research into olfaction is needed to achieve these aims.

The U.S. Army Research Laboratory's (ARL's) Special Report ARL-SR-242 Owing the Environment: Stealth Soldier—Research Outline (May 2012) presented an outline of the visual and auditory research needed to support future military stealth operations, misdirection, and deception activities. The current report expands upon ARL-SR-242, extending its scope into the realm of olfaction. This report discusses the olfactory sense in everyday experience, nature, industry, and history, and proposes future directions for the use of olfaction in military operations.

Category: Olfactory Warfare

Seiden, M.A. (2000) - Taste And Smell Disorders

Approximately two million Americans suffer from taste and smell disorders. This much-needed book provides complete information on the pathophysiology, anatomy, biochemistry, patient evaluation, and treatment of chemosensory disorders. More than a dozen new topics are covered, including:

- The most common causes of 50% of the taste and smell problems patients present with—supported by key diagnostic guidelines
- How to implement accurate, reproducible testing methods when examining patients with a taste or smell complaint
- The state-of-the-art in olfactory mucosal biopsy and histopathology
- Practical new techniques for measuring taste function
- Aging and the chemical senses

Category: Taste, Flavour, Disorders, Neurology, Biology, Medical

Sell, C.S. (2006) - The Chemistry of Fragrances

Ever wondered how perfumes are developed? Or why different scents appeal to different people? The Chemistry of Fragrances 2nd Edition offers answers to these questions, providing a fascinating insight into the perfume industry, from the conception of an idea to the finished product. It discusses the technical, artistic and commercial challenges of the perfume industry in an informative and engaging style, with contributions from leading experts in the field. The book begins with a historical introduction and covers all aspects of the development process - from customer brief to producing a fragrance including; * Ingredients acquisition * Ingredient design and manufacture * Design and analysis of fragrance * Sensory aspects including odour perception * Psychological impact of fragrance * Technical challenges * Safety An updated section on the measurement of fragrance discusses the role of senses in marketing consumer products. This book will appeal to anyone with an interest in the perfumery business and includes an extensive bibliography to enable those interested to explore the field further. It also comes complete with a selection of colour illustrations and a fragranced page.

Category: Chemistry, Perfume Making

Septimus Piesse, G.W., (1855) - The Art of Perfumery And Methods of Obtaining the Odors of Plants

<https://www.gutenberg.org/files/16378/16378-h/16378-h.htm>

Category: History

Shaw, B. (2017) - The Smell of Fresh Rain: The Unexpected Pleasures of Our Most Elusive Sense

What do we actually mean when we say that something smells of fresh paint? Or frying bacon? And what does five o'clock in the morning smell like?

Inspired by unsettlingly synaesthetic questions put to him by his son (a musical genius who has autism) Barney Shaw looks into the science of smell: peering behind its sensory nature to discover its complexities, and finding beauty in its processes.

Shaw's popular science debut is an investigation into the biology, psychology and history of smell. It's also a search for effective ways to describe the kinds of smell we instantly relate to, but find strangely ineffable, and will include a 200-item thesaurus of succinct descriptions of common smells.

Journeying around boatyards, perfume shops and memories, Barney Shaw opens your nose, breaking down the "chords" of smells into component notes and revealing new ways of understanding the world around us.

Category: Syn aesthesia, Biology, Psychology, History

Shichida, Y, Yamashjita, T. Imai, H., Kishida, T. (2013) Evolution and Senses: Opsins, Bitter Taste, and Olfaction

This book focuses on sensing and the evolution of animals. Using the five senses (visual, auditory, and olfactory perception, and taste and touch), animals can receive environmental stimuli and respond to them. Changes in these sensitivities might cause changes in aspects of animals lives such as habitat, activity timing, and diet and vice versa. Recent advances in genome and molecular analysis enable us to investigate certain changes in the receptors or mechanisms involved in sensing and provide clues for understanding the evolution of animals related to those changes.

The first chapter deals with the molecular evolution of opsins. In addition to the well-known function of opsins as visual receptors, opsins can be related to non-visual photoreception such as photoentrainment of circadian rhythm, photoperiodism, and background adaptation. Molecular phylogenetic studies reveal that all opsin genes have evolved from one ancient opsin gene. The evaluation of the functions of each extant opsin protein based on the molecular features enables us to predict the molecular evolution and diversification of opsins during the evolution of animals. These studies shed light on which amino-acid substitutions cause the functional diversification of opsins and how they have influenced the evolution of animals.

The second chapter has to do with bitter taste perception, a key detection mechanism against the ingestion of bioactive substances. Genetic and behavioral evidence reveal the existence of "non-taster" Japanese macaques for specific bitter compounds, which originated in a restricted region of Japan. This finding might provide a clue for elucidating the ecological, evolutionary, and neurobiological aspects of bitter taste perception of primates.

The third chapter presents an extreme example of the evolution of olfaction, namely, that fully aquatic amniotes have generally reduced their olfactory capacity considerably compared to their terrestrial relatives. Interestingly, the remaining olfactory abilities are quite different among three fully aquatic amniotes investigated: toothed whales have no nervous system structures that mediate olfaction, but baleen whales can smell in air, and it has been suggested that sea snakes smell underwater."

Category: Chemistry, Biology

Shiner, L.E. (2020) - Art Scents: Exploring the Aesthetics of Smell and the Olfactory Arts

Although the arts of incense and perfume making are among the oldest of human cultural practices, it is only in the last two decades that the use of odors in the creation of art has begun to attract attention under the rubrics of 'olfactory art' or 'scent art.' Contemporary olfactory art ranges from gallery and museum installations and the use of scents in music, film, and drama, to the ambient scenting of stores and the use of scents in cuisine. All these practices raise aesthetic and ethical issues, but there is a long-standing philosophical tradition, most notably articulated in the work of Kant and Hegel, which argues that the sense of smell lacks the cognitive capacity to be a vehicle for either serious art or reflective aesthetic experience. This neglect and denigration of the aesthetic potential of smell was further reinforced by Darwin's and Freud's views of the human sense of smell as a near useless evolutionary vestige. Smell has thus been widely neglected within the philosophy of art.

Larry Shiner's wide-ranging book counters this tendency, aiming to reinvigorate an interest in smell as an aesthetic experience. He begins by countering the classic arguments against the aesthetic potential of smell with both philosophical arguments and evidence from neuroscience, psychology, anthropology, history, linguistics, and literature. He then draws on this empirical evidence to explore the range of aesthetic issues that arise in each of the major areas of the olfactory arts, whether those issues arise from the use of scents with theater and music, sculpture and installation, architecture and urban design, or avant-garde cuisine. Shiner gives special attention to the art status of perfumes and to the ethical issues that arise from scenting the body, the ambient scenting of buildings, and the use of scents in fast food. Shiner's book provides both philosophers and other academic readers with not only a comprehensive overview of the aesthetic issues raised by the emergence of the olfactory arts, but also shows the way forward for further studies of the aesthetics of smell.

Category: Olfactory Art, History, Philosophy

Silva Teixeira, C. S., et al. (2016) Unravelling the olfactory sense: from the gene to odor perception. Chemical Senses

Although neglected by science for a long time, the olfactory sense is now the focus of a panoply of studies that bring new insights and raises interesting questions regarding its functioning. The importance in the clarification of this process is of interest for science, but also motivated by the food and perfume industries boosted by a consumer society with increasingly demands for higher quality standards. In this review, a general overview of the state of art of science regarding the olfactory sense is presented with the main focus on the peripheral olfactory system. Special emphasis will be given to the deorphanization of the olfactory receptors (ORs), a critical issue because the specificity and functional properties of about 90% of human ORs remain unknown mainly due to the difficulties associated with the functional expression of ORs in high yields

Category: Chemistry, Neurology, Biology

Spedale, S. (2019) - How to Smell the Wine: Practical manual to learn the techniques of olfactory analysis of wine step by step

Category: Flavoujr, Taste

Smith, L.L. (2016) - The Role of Olfaction on Human Psychology: Your Sense of Smell Turns Out to Be Hot-Wired to your Emotional Brain

Olfaction is probably one of our least understood senses, but it has the most direct route affecting the central core of the brain where we live—the limbic system. Scents, memories, and emotions get connected in an intimate way. It is not too farfetched to see why those who have impairment of the olfactory sense also suffer from different neurological or emotional problems. In the *Role of Olfaction on Human Psychology*, the author focuses on this unique interconnection to help us see how our sense of smell has played a role in keeping us alive as well as affecting us with a rich emotional life.

The importance of pheromones is also discussed along with subliminal fragancing. In modern life we aren't so aware of human pheromones, at least not on a conscious level. However, they play significant roles in how we conduct our social behavior.

As aromatherapists this is one area that we need to thoroughly understand. Yes, the study of essential oils is much more than fragrances, but knowing how these odorant molecules actually affect our brains and every cell of the body is crucial to our being able to assess and help the clients who come to us. And for those who aren't aromatherapists but curious about how this sense works, you may begin to view aromas in a whole new light!

Category: Psychology

Stamelman, R., Freeman, M. (photographer) (2006) - Perfume: Joy, Scandal, Sin - A Cultural History of Fragrance from 1750 to the Present

This thought-provoking volume transports readers to France of the eighteenth, nineteenth, and twentieth centuries, beginning with Napoleon's love of perfume and the erotic importance he attached to it, through the lore and symbolism fragrance enjoyed in eighteenth and nineteenth-century Europe. By the early twentieth century, perfume's place as one of France's most important luxury industries was recognized and celebrated, and timeless fragrances—such as Chanel No. 5, Shalimar, Arpeges, and Joy—were launched.

The distinctive bottles for these new essences and the art movements that inspired their design are detailed throughout the book, as are paintings, poetry, and literature that reveal the power of perfume and its ability to recall the past and evoke sensuality. According to nineteenth-century perfumer Eugene Rimmel, "the history of perfume is, in some manner, the history of civilization." Through fascinating text accompanied by gorgeous imagery, including packaging, labels, and advertisements, *Perfume: Joy, Scandal, Sin* explores perfume's impact on history, culture, society, art, and attitudes.

Category: Perfume, History

Stefano, M.L. (2012) - Safeguarding Intangible Cultural Heritage

Awareness of the significance of intangible cultural heritage (ICH) has recently grown, due to the promotional efforts of UNESCO and its Convention for the Safeguarding of the Intangible Cultural Heritage (2003). However, the increased recognition of intangible heritage has brought to light its undervalued status within the museum and heritage sector, and raised questions about safeguarding efforts, ownership, protective legal frameworks, authenticity and how global initiatives can be implemented at a local level, where most ICH is located.

This book provides a variety of international perspectives on these issues, exploring how holistic and integrated approaches to safeguarding ICH offer an opportunity to move beyond the rhetoric of UNESCO; in particular, the authors demonstrate that the alternative methods and attitudes that frequently exist at a local level can be the most effective way of safeguarding ICH.

Perspectives are presented both from "established voices", of scholars and practitioners, and from "new voices", those of indigenous and local communities, where intangible heritage lives. It will be an important resource for students of museum and heritage studies, anthropology, folk studies, the performing arts, intellectual property law and politics.

Michelle Stefano is Folklorist-in-Residence, University of Maryland Baltimore County; Peter Davis is Professor of Museology, International Centre for Cultural and Heritage Studies, Newcastle University; Gerard Corsane is Senior Lecturer in Heritage, Museum and Galley Studies, International Centre for Cultural and Heritage Studies, School of Arts and Cultures, Newcastle University. Contributors: Marilena Alivizatou, Alissandra Cummins, Kate Hennessey, Ewa Bergdahl, George Abungu, Shatha Abu-Khafajah, Shaher Rababeh, Vasant Hari Bedekar, Christian Hottin, Sylvie Grenet, Lyn Leader-Elliott, Daniella Trimboli, Lontine Meijer-van Mensch, Peter van Mensch, Andrew Dixey, Susan Keitumetse, Richard MacKinnon, Alexandra Denes, Christina Kreps, Harriet Deacon, D. Jared Bowers, Gerard Corsane, Paula Assuncao dos Santos, Elaine Miller, Michelle L. Stefano, Maurizio Maggi, Aron Mazel

Category: Intangible Heritage

Stiles, K.G., M.M. (2012) - The Chemistry of Essential Oils Made Simple

THIS GUIDE will give you an insider's look at the chemistry of essential oils. You'll discover why the chemical components of essential oils produce the extraordinary benefits essential oils are renowned for.

From treating infectious disease, to alleviating depression and anxiety, you'll understand why the chemical components of essential oils makes them work so effectively to elieve a wide variety of physical health and psycho-emotional issues.

HIGHLIGHTS:

Understand the language and code of chemistry in practice.

Research on Chemical components of essential oils.

Plant Identification and How to Select Essential Oils to get results.

The Twelve (12) Chemical Families and their Specific properties, actions and effects, i.e. hormone balance, depression, anxiety, sleep, mood, weight loss, infections, autoimmunity and more.

Pure essential oils in each family.

Category: Chemistry, Perfume Making

Stoddart, M. (1990) - The Scented Ape: The Biology and Culture of Human Odour:

This book examines the sense of smell in humans, comparing it with the known functions of the same sense in other animals. Odorous cues play a role in sexual physiology and behavior in animals and there are claims that odor can play the same role in humans. The place of odors and scents in aesthetics and in psychoanalysis serves to illustrate the link between the emotional centers and the brain.

The book presents arguments to explain the way in which our ancestral past has given rise to our modern day olfactory enigmas. Containing a glossary and chapter summaries the book will be accessible to a wide audience.

Category: Biology, Sociology, History

Süskind, P., Woods, J.E. (1985) - Perfume: The Story of a Murderer

An acclaimed bestseller and international sensation, Patrick Suskind's classic novel provokes a terrifying examination of what happens when one man's indulgence in his greatest passion—his sense of smell—leads to murder.

In the slums of eighteenth-century France, the infant Jean-Baptiste Grenouille is born with one sublime gift—an absolute sense of smell. As a boy, he lives to decipher the odors of Paris, and apprentices himself to a prominent perfumer who teaches him the ancient art of mixing precious oils and herbs. But Grenouille's genius is such that he is not satisfied to stop there, and he becomes obsessed with capturing the smells of objects such as brass doorknobs and fresh-cut wood. Then one day he catches a hint of a scent that will drive him on an ever-more-terrifying quest to create the "ultimate perfume"—the scent of a beautiful young virgin. Told with dazzling narrative brilliance, *Perfume* is a hauntingly powerful tale of murder and sensual depravity.

Category: Literature, Fiction

Swanson, L.W., Björklund, A., Hökelt, T. (1996) - Integrated Systems of the CNS, Part III: Cerebellum, Basal Ganglia, Olfactory System

This book represents the third part of Integrated Systems of the CNS in the Handbook of Chemical Neuroanatomy. Part I is concerned with limbic regions and the hypothalamus, as well as with the retina. Part II contains reviews of central pathways associated with four major sensory systems. Part III is dedicated to W.J.H. Nauta, best remembered for the first selective silver implantation technique for dealing with degenerating axons. The volume is divided into three sections: the cerebellum, chemoarchitecture and anatomy; the basal ganglia; and the olfactory system. An excellent volume to keep pace with this challenging and rapidly developing field.

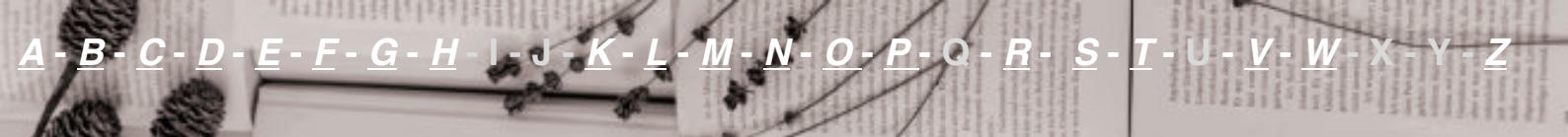
Category: Chemistry, Neurology, Biology

T

Toko, K. (2013) - Biochemical Sensors: Mimicking Gustatory and Olfactory Senses

This book is the first to comprehensively treat sensors for gustatory and olfactory senses. It will be highly useful to students and researchers in a wide variety of scientific fields and also to those in the fields of foods, perfumes, medicines and robotics as the sensor applications.

Category: Taste, Flavour, Sensors



Tullett, W. (2019) - Smell in Eighteenth-Century England: A Social Sense

In England from the 1670s to the 1820s a transformation took place in how smell and the senses were viewed. The role of smell in developing medical and scientific knowledge came under intense scrutiny, and the equation of smell with disease was actively questioned. Yet a new interest in smell's emotive and idiosyncratic dimensions offered odour a new power in the sociable spaces of eighteenth-century England.

Using a wide range of sources from diaries, letters, and sanitary records to satirical prints, consumer objects, and magazines, William Tullett traces how individuals and communities perceived the smells around them, from paint and perfume to onions and farts. In doing so, the study challenges a popular, influential, and often cited narrative. *Smell in Eighteenth-Century England* is not a tale of the medicalization and deodorization of English olfactory culture. Instead, Tullett demonstrates that it was a new recognition of smell's asocial-sociability, and its capacity to create atmospheres of uncomfortable intimacy, that transformed the relationship between the senses and society.

Category: *History, Sociology*

Turin, L. (2006) - The Secret of Scent: Adventures in Perfume and the Science of Smell

The Secret of Scent is a book about science by way of art, in which the author's passion for perfume leads him to the scientific mystery of what makes one molecule smell of garlic while another smells of rose.

Readers who know Luca Turin as the lively central figure in Chandler Burr's *The Emperor of Scent* will remember the ongoing debate between two competing theories of smell—one based on molecular shape, the other on molecular vibrations. Now Turin himself describes in detail the science, evidence, and long history of this debate, from the beginnings of organic chemistry to the present day, and pays homage to those before him who got it right. This fascinating and accessible account will appeal to anyone who has ever wondered about smell, still the most mysterious of the senses.

Category: *Perfume*

Turin, L., Sanchez, T. (2008) - Perfumes: The Guide

Luca Turin and Tania Sanchez are experts in the world of scent. Turin, a renowned scientist, and Sanchez, a longtime perfume critic, have spent years sniffing the world's most elegant and beautiful—as well as some truly terrible—perfumes. In *Perfumes: The Guide*, they combine their talents and experience to review more than twelve hundred fragrances, separating the divine from the good from the monumentally awful. Through witty, irreverent, and illuminating prose, the reviews in *Perfumes* not only provide consumers with an essential guide to shopping for fragrance, but also make for a unique reading experience.

Perfumes features introductions to women's and men's fragrances and an informative "frequently asked questions" section including:

- What is the difference between eau de toilette and perfume?
- How long can I keep perfume before it goes bad?
- What's better: splash bottles or spray atomizers?
- What are perfumes made of?
- Should I change my fragrance each season?

Perfumes: The Guide is an authoritative, one-of-a-kind book that will do for fragrance what Robert Parker's books have done for wine. Beautifully designed and elegantly illustrated, this book will be the perfect gift for collectors and anyone who's ever had an interest in the fascinating subject of perfume.

Category: *Perfume*

Turin, L., Sanchez, T. (2011) - The Little Book of Perfumes: The Hundred Classics

The quintessential guide to the one hundred most glorious perfumes in the world. When Luca Turin and Tania Sanchez published *Perfumes: The Guide* in 2008, it was hailed as "ravishingly entertaining" by John Lanchester in *The New Yorker*, "witty and knowledgeable" on Style.com, and "provocative and hugely entertaining" by the *Times Literary Supplement*. *The Little Book of Perfumes* focuses on just one hundred masterpieces of perfume: ninety-six five-star perfumes from the original book, as well as four "museum" perfumes-legendary scents that are preserved in the Versailles Osmothèque.

This stunningly produced petite volume offers lovers of perfume the best of the best-a perfect gift book for anyone looking either for a brilliant fragrance or an intelligent, witty read.

Category: *Perfume*

Turin, L., Sanchez, T. (2018) - Perfumes The Guide 2018

In 2008, Turin and Sanchez up-ended the world of fragrance with their critically acclaimed *Perfumes: The A-Z Guide*, one of Amazon's best books of the year, described by John Lanchester in the *New Yorker* as "ravishingly entertaining," by India Knight in the *Sunday Times* (UK) as "one of the best books I have ever read," by Hilary Mantel as "opinionated, knowledgeable, sharply written and surprisingly comprehensive ... a purely enjoyable book," and by Philip Hensher as "a work of the highest criticism, one which elevates writing about perfume to the best sort of writing about wine or rock music." Ten years later they bring their inimitably passionate, erudite perspective back to the hugely changed world of fragrance, to sort out which of over 1,200 new individual perfumes deserves celebration (and which condemnation).

The 2018 guide includes all new content, including

- "Ten Years Later," looking back on the last decade of fragrance
- "The Shifting Shape of Fragrance 1918-2018"
- all new FAQ
- over 1,200 individual reviews: masculine and feminine, mainstream and arcane, from the latest Guerlains to a 5-star masterpiece by a small Malaysian firm
- an expanded glossary
- top 10 lists, this time including not just masculines and feminines but introverts and extroverts, the best retro, citrus, oud, and more

Category: *Perfume*

V

Verbeek, C. (2021) - Een kleine cultuurgeschiedenis van de (grote) neus In *Een kleine cultuurgeschiedenis van de (grote) neus* neemt Verbeek de lezer mee op een reis langs opvallende neuzen in de westerse kunst en cultuur, van Michelangelo, Rembrandt en Gogol tot Barbie, Barbra Streisand en #sideprofileselfie. Caro Verbeek laat zien hoezeer ons esthetische oordeel afhangt van culturele omstandigheden waarvan we ons vaak nauwelijks bewust zijn. Maar bovenal is het een lofzang op de neus, in al zijn vormen en afmetingen. Als student kunstgeschiedenis kwam Caro Verbeek in aanraking met een enorme variëteit aan prachtige neuzen: groot en klein, recht en gebogen, plat en puntig.

In veel portretten bleken markante exemplaren nog eens extra te zijn aangezet door de kunstenaar. Hoewel het hedendaagse schoonheidsideaal anders doet vermoeden, werd een grote neus in het verleden gezien als een indicator van intellect, moed, karakter en status. Zo werd het dodenmasker van Dante gemanipuleerd om hem een echte 'dichtersneus' te geven, was de beeltenis van Cleopatra's adelaarsneus een politieke strategie en schreef de renaissancegedichter Annibale Caro zelfs het lofdicht *Nasea* over de aanzienlijke neus.

Category: History, Sociology

Vernon Pearlstine, E. (2022) - Scent: A Natural History of Fragrance

A fascinating exploration of the natural history of scent and human perceptions of fragrance from the viewpoint of plant and pollinator

Plants have long harnessed the chemical characteristics of aromatic compounds to shape the world around them. Frankincense resin from the genus *Boswellia* seals injured tissues and protects trees from invading pathogens. Jasmine produces a molecule called linalool that attracts pollinating moths with its flowery scent. Tobacco uses a similarly sweet-smelling compound called benzyl acetone to attract pollinators. Only recently in the evolutionary history of plants, however, have humans learned to co-opt their fragrances to seduce, heal, protect, and alter moods themselves.

In this wide-ranging and accessible new book, biologist-turned-perfumer Elise Vernon Pearlstine turns our human-centered perception of fragrance on its head and investigates plants' evolutionary reasons for creating aromatic molecules. Delving into themes of spirituality, wealth, power, addiction, royalty, fantasy, and more, Pearlstine uncovers the natural history of aromatic substances and their intersection with human culture and civilization.

Category: History, Perfume

Vroon, P. (1997) - Smell, the Secret Seducer

Smell: The Secret Seducer is a cultural history, a compendium of odd facts, and a kind of tribute to the sense of smell, which, of the five senses, is the one we most commonly take for granted. Piet Vroon is a psychologist in the Netherlands, and in this odd and surprising book he demonstrates that the sense of smell is vital to our experience of the world, which would be much less interesting and intelligible without its odors, fragrances, aromas, and scents. Imagine being overcome unexpectedly by poison gas, being unable to smell the slyly fruity bouquet of a fine wine, or having no idea what one's lover smells like. A world without smell would be a sadly diminished place. How we smell is Vroon's subject and his metier. In a brief history of smelling, Vroon shows how over time some cultures have exalted strong smells (associating them with passion, virility, and excitement), while others have considered them the evidence of decadence and barbarism. In Vroon's view, Western culture has been so thoroughly cleansed of unpleasant odors and stench that we take the olfactory sense for granted.

Category: History, General

W**Welge-Luessen, A., Hummel, T. (2013) - Management of Smell and Taste Disorders: A Practical Guide for Clinicians**

A modern, practical handbook on smell and taste disorders written by clinicians for clinicians

Recent breakthroughs in the diagnosis and treatment of smell and taste disorders have dramatically altered clinical outcomes for these patients. In this important book, readers will get a full overview of the topic today, including functional anatomy, pathophysiology, diagnostic and clinical work-up, assessment techniques, medical and surgical options, and more. Focused and to-the-point, the book is especially designed for physicians treating patients in the everyday practice setting.

Special Features:

Covers the most important advances in diagnostic and treatment techniques

Provides a clear methodology for examining, testing, classifying, diagnosing, and treating a wide range of idiopathic, congenital, and acquired smell and taste disorders

Explores the use of MRI for improved visualization of central olfactory areas, including the lesions and other disturbances that cause olfactory disorders

Offers new information on the interaction between the chemical senses, especially important in medicolegal cases

Includes more than 130 full-color diagrams, clinical pathways, tables, photographs, and anatomic illustrations that clarify all concepts

Complete with expert foundational chapters on the anatomy and structure of the olfactory and gustatory systems, as well as compelling information on quality-of-life issues, this book makes a major contribution to the field. It is essential for otolaryngologists, neurologists, internists, residents, and other specialists treating patients with smell and taste disorders in a modern clinical setting.

Category: Disorders, Neurology, Medical

Willem, J.-P., (2022) - Alzheimer's, Aromatherapy, and the Sense of Smell: Essential Oils to Prevent Cognitive Loss and Restore Memory

- Cites multiple clinical studies to show how Alzheimer's is critically bound with the sense of smell and how the loss of this sense is often the first symptom of onset
- Details how to use essential oils to stimulate memory, prevent cognitive loss, and counter the isolation, withdrawal, and depression of Alzheimer's patients
- Reveals the striking results seen in several French hospitals and senior living homes where aromatherapy has been used as a therapy for Alzheimer's

While there is still no known cure for Alzheimer's, new research and trials from France reveal that it is possible to slow its progression, ameliorate some of its effects, and improve the quality of life for those suffering from this degenerative condition, using the sense of smell.

Citing years of clinical evidence, Jean-Pierre Willem, M.D., shows how Alzheimer's is critically bound with the sense of smell. He explains how the olfactory system is connected to the limbic area of the brain, which holds the keys to memory and emotion and is the area of the brain most severely afflicted by Alzheimer's. He reveals how one of the very first signs of Alzheimer's is typically the loss of the sense of smell. Sharing the striking results seen in French hospitals and senior living homes where aromatherapy has been used as a therapy for Alzheimer's for more than 10 years, Dr. Willem details how to use essential oils to stimulate memory, prevent cognitive loss, and counter the isolation, withdrawal, and depression these patients are likely to feel. He explains how essential oils make a direct connection with the cerebral structures involved in emotion and memory and make it possible for the patient to bring deeply buried memories back to the thinking surface. This allows the patient to recover a portion of their identity, which can become the foundation for additional healing, including regaining the ability to communicate and reducing behavioral issues. Tracing the evolutionary links between smell and taste, he also explores the effects of diet and nutrition on Alzheimer's and other forms of dementia, explaining the benefits of raw foods, what foods to avoid, and what supplements can help.

Offering a hands-on and medication-free way to help those suffering from Alzheimer's, this guide provides a way for Alzheimer's patients and their families to recover the joy of living again.

Category: Disorders, Medical

Williams, D. G. (2004) - Perfumes of Yesteryear

"This book is about the perfumes which were commonly made and sold in the perfumeries and chemists' shops in Britain over a period of some two hundred years from about the beginning of the eighteenth century, soon after Jean-Antoine Farina moved from Italy to settle in the German city of Cologne, which gave its name to the most popular toilet water of all time."

So begins *Perfumes of Yesterday*, which provides a fascinating account of the development of perfumery, as it progressed mainly from the seventeenth to the twentieth centuries. It focuses particularly on the Victorian and Edwardian eras in Britain, but also follows the parallel development of perfumery in other countries in Europe.

The book's purpose is to provide a study of the old and mostly simple examples of the perfumer's art in order to gain some insight into the ancestry, and therefore a better understanding, of the more complex fragrances of today, themselves already the progenitors of the perfumes of tomorrow.

The historical approach of the first part of the book gives context to its main section – formularies of perfumes and toilet waters that have been gathered from published articles and books dating from or before the 1920s and which relate mostly to perfumes of much earlier origin, some from as far back as the eighteenth century, when chemistry had yet to become an exact science and the possibility of its application to perfumery quite beyond imagination. One recipe for an Eau de Cologne dates from 1700.

Following each formula is a discussion of various aspects of the perfume: its composition; the geographical and botanical sources of its ingredients and the method of extraction of its essential oils; its odour properties and the fragrance effects resulting from its particular combination of ingredients – and, here, an analysis of the composition of some of the apparently simple perfumes reveals a staggering complexity of major, minor and trace components. The discussion may also cover the historical context of a perfume's use; the history behind its name; and the counterparts of its ingredients in modern perfumery. The book concludes with a discourse on the perfumes of today and tomorrow. The main sections are followed by five appendices, a glossary of some technical terms, a reading list and an index.

Category: Perfume

Williams, T. (2013) - Cult Perfumes: The World's Most Exclusive Perfumeries

Even in times of economic hardship, perfume is an affordable luxury, recognized for its ability to make us not only smell good but also feel great. No woman's dressing table or bathroom cabinet is complete without at least one bottle. *Cult Perfumes* is the first book to explore the most exclusive boutique perfumeries producing some of the world's most captivating scents. Tessa Williams documents more than 25 perfumeries and brands, ranging from the pharmacy of Santa Maria Novella in Florence, established by Dominican fathers in 1221, and the classic English company Floris, founded in 1730, to the new eponymous range created by the famed fragrance expert Roja Dove. Williams goes behind the scenes at each perfumery to interview the perfumers and explore the evolution of the company, the ethos behind the brand, and its signature scents. With a concise illustrated introduction to the history of perfume-making and features on iconic perfumes, future cult classics, and the so-called 'noses' who keep the brands attuned to today's popular scents, *Cult Perfumes* will be as alluring to lovers and collectors of perfume as the fragrances it presents.

Category: Perfume

Wilson, D.A. (2006)- Learning to Smell: Olfactory Perception from Neurobiology to Behavior

Written by a neurobiologist and a psychologist, this volume presents a new theory of olfactory perception. Drawing on research in neuroscience, physiology, and ethology, Donald A. Wilson and Richard J. Stevenson address the fundamental question of how we navigate through a world of chemical encounters and provide a compelling alternative to the "reception-centric" view of olfaction.



The major research challenge in olfaction is determining how the brain discriminates one smell from another. Here, the authors hold that olfaction is generally not a simple physiochemical process, but rather a plastic process that is strongly tied to memory. They find the traditional approach—which involves identifying how particular features of a chemical stimulus are represented in the olfactory system—to be at odds with historical data and with a growing body of neurobiological and psychological evidence that places primary emphasis on synthetic processing and experiential factors.

Wilson and Stevenson propose that experience and cortical plasticity not only are important for traditional associative olfactory memory but also play a critical, defining role in odor perception and that current views are insufficient to account for current and past data.

The book includes a broad comparative overview of the structure and function of olfactory systems, an exploration into the mechanisms of odor detection and olfactory perception, and a discussion of the implications of the authors' theory. *Learning to Smell* will serve as an important reference for workers within the field of chemical senses and those interested in sensory processing and perception.

Category: Neurology, Biology

Z

Zhou, W. (Dissertation) - Human olfactory perception and olfactory communications of social information

As one of the five basic senses, olfaction provides a unique channel to understand our sensory world and socioemotional experiences. It is phylogenetically old, highly conserved in evolution, and ubiquitously employed in the animal kingdom to communicate identity and motivation. Nevertheless, compared to vision and audition, human olfaction is poorly researched. Here six studies were conducted to probe the sensory properties of human olfactory system and its role in socioemotional communication.

Study I examined whether sensory rivalry, as in binocular rivalry, also exists in the olfaction system. Study II looked at the influence of smells on visual perception. Study III tested the effect of chemosensory fearful cues on visual emotional perception. Study IV tested people's ability to detect chemosensory emotional cues and the role of familiarity in their sensitivity to such cues. Study V correlated one's chemosensory ability with his/her emotional capacity to probe the behavioral linkages between human olfaction and emotion. Lastly, Study VI examined the neural correlates of the social nature of natural human body odors by using a group of subjects with various degrees of social anxiety.

The results demonstrate that there can be rivalry in olfactory processings between the two nostrils and in the cortex, and olfactory processings interact with visual processings. In addition, olfaction and emotion are closely related to each other. The olfactory system processes the socioemotional information conveyed by natural human body odors, which influences people's behavior and emotional processings, but often without their subjective awareness.

Category: Dissertation, Olfactory Processing, Perception

Zucco, G.M. (2012) - Olfactory Cognition: From Perception and Memory to Environmental Odours and Neuroscience

This book was conceived as a tribute to one of the founders of the psychological study of the sense of smell, Professor Trygg Engen. The book is divided into four sections.

The first reunites the fields of psychophysics and the perception of environmental odours and discusses the impact of odours on beliefs and expectations. The second addresses cognitive processes in olfaction, how odours are interpreted, lexicalized, associated with contexts and remembered. The third focuses on the cerebral bases of olfactory awareness and the neuropsychological investigation of olfaction with special emphasis on olfactory dysfunctions, and the last concerns affective and developmental processes in olfaction. The aim in producing this book is that it will help promote further research in olfactory cognition and attract new inquisitive scientists to the field. The volume will be a useful resource for academics, students, and professionals who study olfaction, as well as to scientists who work in the domains of perception, cognitive neuroscience and environmental psychology more broadly. (Series B)

Category: Perception, Neurology, Memory