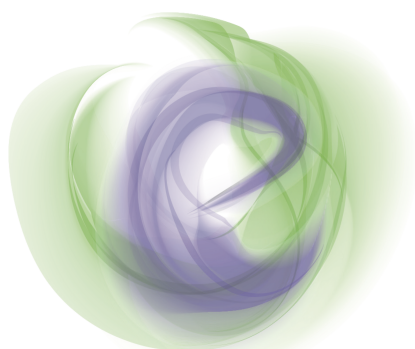


Olfactory Storytelling Toolkit (OST)

Deliverable D7.4

Version FINAL



Odeuropa

NEGOTIATING OLFACTORY AND SENSORY EXPERIENCES IN CULTURAL HERITAGE PRACTICE AND RESEARCH



The Odeuropa project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004469. This document has been produced by the Odeuropa project. The content in this document represents the views of the authors, and the European Commission has no liability in respect of the content.

Grant Agreement No.	101004469
Project Acronym	ODEUROPA
Project full title	Negotiating Olfactory and Sensory Experiences in Cultural Heritage Practice and Research
Funding Scheme	H2020-SC6-TRANSFORMATIONS-2020
Project website	http://odeuropa.eu/
Project Coordinator	Prof. Dr. Inger Leemans KNAW Humanities Cluster Email: inger.leemans@huc.knaw.nl
Document Number	Deliverable D7.4
Status & version	FINAL
Contractual date of delivery	31 August 2023
Date of delivery	31 August 2023
Type	Demonstrator
Security (distribution level)	Public
Number of pages	206
WP contributing to the deliverable	WP5, WP6 WP7
WP responsible	WP7
EC Project Officer	Hinano Spreafico
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Keywords:	Olfactory storytelling, Olfactory events, GLAMs, Impact, Training, Smell, Barriers, Communication, Dissemination
Abstract:	<i>The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions (OST)</i> is an open access resource created for conservators, curators, educators, tour guides, museum directors, archivists, librarians, and all others who are interested to work with smells in a heritage context. Its contents are based on the research carried out by members of the Odeuropa project. The guide is an online resource which is available via the Odeuropa website. The main goal of the resource is to provide a basis for cultural heritage professionals to use smell as a storytelling technique within their curatorial practices. It outlines best practices, procedures and instructions for using olfactory storytelling. In this document, we will describe the aims and development of the Olfactory Storytelling Toolkit, as well as its structure and our dissemination and exploitation strategy upon its release. The Olfactory Storytelling Toolkit can be reached at https://odeuropa.eu/the-olfactory-storytelling-toolkit/ . This deliverable should be read alongside other impact related reports: <i>Guidelines on the use of smells in GLAMs (D6.1)</i> , <i>Questionnaires for Measuring the Value of Introducing Smells in GLAMs (D6.3)</i> and the <i>Odeuropa Impact Activities Report Year 1 (D2.2)</i> , and <i>Year 2 (D7.3)</i> .

Table of Revisions

Version	Date	Description and reason	By	Affected sections
0.1	31 July 2023	Draft	S.C. Ehrich	All
0.2	11 August 2023	Internal review	W. Tullett, R. Troncy	All
0.3	14 August 2023	Revision after Review	S.C. Ehrich	All
0.4	18 August 2023	Second internal review	S. Tonelli; I. Lee-mans	All
0.5	28 August 2023	Revision after review, Additional section	S.C. Ehrich; I. Lee-mans	All
1.0	30 August 2023	Final check and approval by project manager	Marieke van Erp	-

Executive Summary

Summary table

Challenges	The main challenges of developing the <i>Olfactory Storytelling Toolkit (D7.4)</i> and the connected tasks and deliverables were twofold. The first challenge was the broad lack of knowledge around the value and application of olfactory storytelling in GLAMs (galleries, libraries, museums, archives). The second challenge was reviewing and organising the knowledge we gained throughout the course of the project and compiling this together into a "toolkit" that is accessible and relevant to our target audience (GLAM professionals).
Barriers	The Covid-19 pandemic posed barriers for the tasks and impact activities related to this deliverable. In person meetings and workshops with GLAM professionals had to be scheduled online. To reach comparable 'nose-on' experiences we designed a set of offline olfactory knowledge strategies such as mailing smell kits and DIY Scent Programs. To ensure further hands-on engagement with GLAM professionals, we planned lectures and seminars that specifically targeted these audiences.
Practices	D7.4 (coordinated by WP7) required the successful organisation and documentation of the events and workshops: Working with scent in GLAMs - Best Practices and Challenges, Follow Your Nose. A Guided Tour with Smell, Malodours as Cultural Heritage?, City Sniffers: a smell tour of Amsterdam's ecohistory, and Improve Your Olfactory Language T7.2-T7.6 . Additionally, coordination with WP5 and WP6 was necessary via the completion of <i>Identifying existing smell narratives in museological and heritage practice (T5.2)</i> , <i>Assessment study: 'Biases and concerns of olfactory experiences in GLAMs (T6.1)</i> and <i>Digital resource reuse: measuring impact of olfactory museology techniques(T6.2)</i> . The completion of D7.4 also required the completion of related deliverables <i>Guidelines on the use of smells in GLAMs ((D6.1)</i> , <i>Questionnaires for measuring the value of introducing smells in GLAMs (D6.2)</i> <i>Impact Activities Report Year 1 (D7.2)</i> , and <i>Impact Activities Report Year 2 (D7.3)</i>). Throughout the development of the above activities, we learned that there are different opportunities for collaboration and knowledge exchange within olfactory museology practise. To ensure that D7.4 represented various perspectives within the field and was applicable to all of our target audiences, we (1) invited external contributions from interdisciplinary experts and (2) conducted an external review with representatives from the GLAM sector and scent industry.
Guidelines	D7.4 in itself is a guideline for working with smells in GLAMs. It is a basis for establishing best practices and guidelines for bringing scents to GLAMs and intends to be the starting point for future research efforts.

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1 Introduction: State of the Art

At the start of the Odeuropa project in 2021, cultural heritage institutions had already been experimenting with olfactory approaches for some time. Academic research started to capture this new trend, describing the potential for incorporating olfactory storytelling in GLAMs [Drobnick et al., 2006, Verbeek, 2016, Castel, 2018, Classen, 2007]. Methods for multisensory storytelling were projected to offer novel and innovative ways to present collections and a competitive way to attract new visitors. However, although the impact of olfactory approaches in GLAMs was projected as high, this was not yet based on robust scientific research. Furthermore, there were still many unanswered questions around the contextualisation and distribution of scents in museums and around the risks that those scents may pose to such environments [Spence, 2020].

To resolve these concerns, the Odeuropa project initiated a baseline measurement capturing **(1)** the interest for olfactory storytelling in GLAMs (galleries, libraries, archives, museums); **(2)** the values of olfactory storytelling within the cultural heritage sector; and **(3)** the concerns of GLAM professionals around olfactory storytelling. These issues were analysed in the deliverables *Guidelines on the use of smells in GLAMs (D6.1)*, and carrying out *Questionnaires for measuring the value of introducing smells in GLAMs (D6.2)*.

While our baseline measurements proved the significant interest and enthusiasm for the use of olfactory storytelling in cultural heritage institutions and the impact these methods has on their visitors, the results of our research showed that many challenges and questions remain. Questions include: how to present odours in GLAM environments in a way that leads to worthwhile storytelling? How to address issues around the authenticity and transparency of heritage scent representations? Is there conclusive scientific evidence that legitimises different values of olfactory storytelling in GLAMs? And how to safely and effectively present and distribute scents in GLAMs? This last question is crucial as the presentation and distribution methods employed for olfactory storytelling design are often viewed as hazards to the GLAM environment by heritage professionals. This is the case even though low but perceivable amounts of VOCs (volatile organic compounds) do not pose a risk to the artworks and surrounding environment (staff, visitors, and collection items) [Strlič et al., 2009].

The Odeuropa project set out to address these concerns. We analyzed the pros and cons of olfactory storytelling through experiments within the cultural heritage sector: by organizing olfactory events, trying out various methodologies for scent representations and distributions, and by organizing visitor impact measurements. These activities informed solutions to the challenges and barriers which exist within the field of olfactory museology and helped to better understand what was still lacking.

The Odeuropa project aimed to equip GLAM institutions and professionals with methods and guidelines for olfactory storytelling by publishing the *Olfactory Storytelling Toolkit (D7.4)*. The Olfactory Storytelling Toolkit (**OST**) informs and educates GLAM professionals about the (opportunities of) existing olfactory storylines, objects and environments that lie within their heritage collections and provide them with the resources necessary to use olfactory storytelling techniques and bring these topics through to their visitor engagement strategies. We achieved this via further research into the state-of-the-art of current olfactory event design (scent distribution techniques), experimentation with these different methodologies via Odeuropa's olfactory events, and lastly, by developing methodologies for conservators and curators to use when creating and evaluating scents as well as information on how to safely employ these techniques in GLAM environments.

Over the course of the Odeuropa project (2021-2023), the need for the **OST** became even more critical. Occurrences of olfactory events and exhibitions are rising (e.g. *Fleeting - Scents in Color (2020-2021)*, *Odore (2021)*, *Smell It! (2021)*, *L'Odysée Sensorielle (2021-2022)*, *Es-Senze (2022)*, *Respirer L'Art (2022-2023)*, and *Sensational Books (2022)* etc.) in addition to a boom of smell (culture) research and appreciation through the recent establishment of international olfactory-related institutions and businesses (e.g. *Olfactory Art Keller (2020)*, *World Taste and Smell Association (2021)*, and the *Smell Studies Group* etc.). Since the announcement of the project at the end of 2019, Odeuropa received dozens of requests from GLAM institutions, researchers

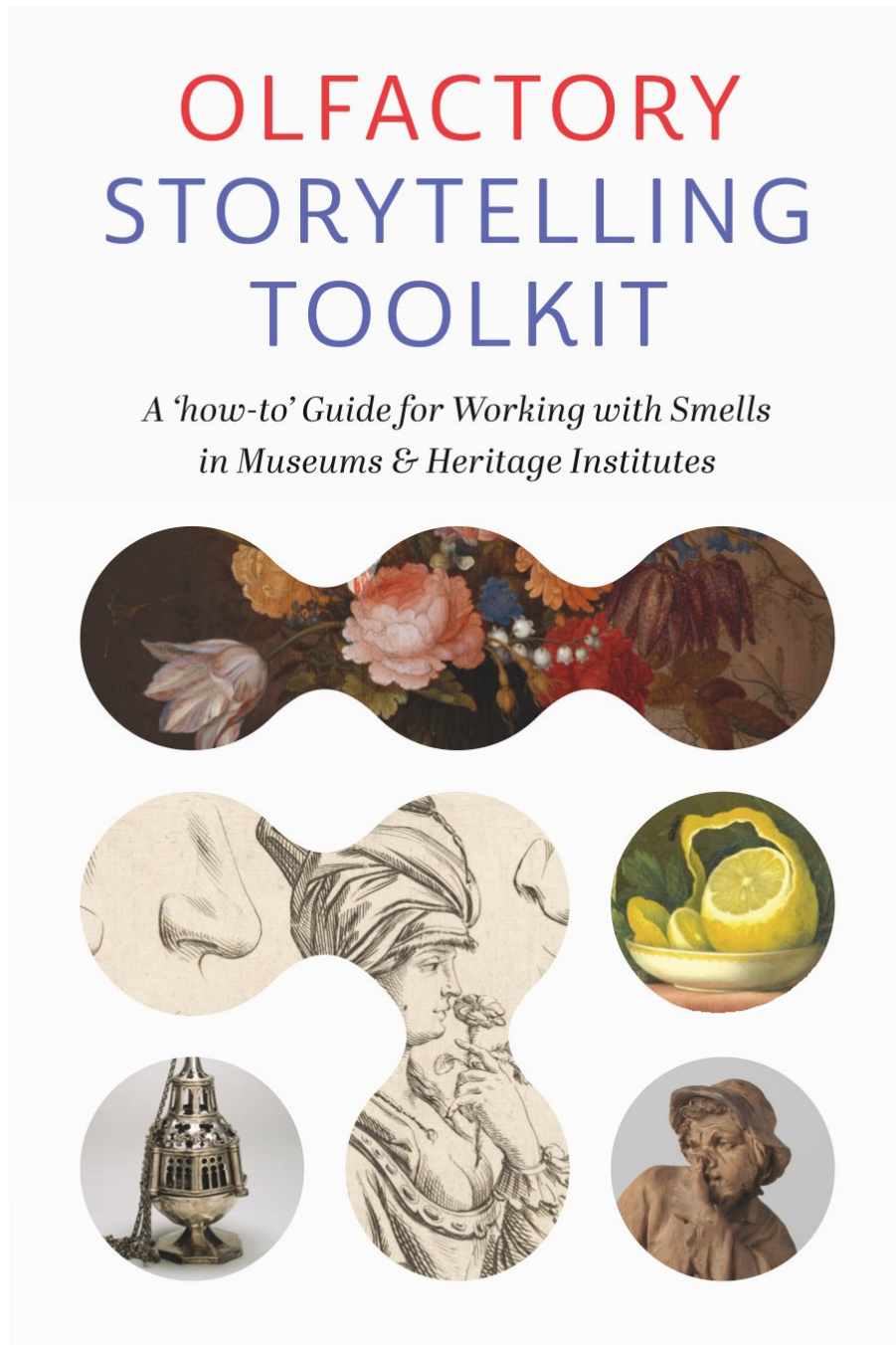


Figure 1: Draft Cover for the Olfactory Storytelling Toolkit: A “how-to” Guide for Working with Smells in Museums and Heritage Institutions designed by Mijke Wondergem.

and individuals who sought advice for using olfactory storytelling techniques in their own projects and events. Over 200 institutes and individuals signed up for the Odeuropa network to keep track of its progress, while the Odeuropa X (formerly Twitter) account has reached 1660 followers. The release of the **OST** will serve as a response to these interests, as well as a starting point for future research in the field of olfactory and sensory museology.

2 Development of the Olfactory Storytelling Toolkit

In this section, we will outline the initial goals, challenges, development and impact activities that contributed to the end result of this deliverable. The initial development and impact activities included Odeuropa's olfactory events and stakeholder engagement via various outputs.

2.1 Goals

The **OST** works towards three main objectives of the Odeuropa Project. Firstly, it supports the claim that critically engaging our sense of smell and our olfactory heritage is an important and a viable means for connecting and promoting Europe's tangible and intangible cultural heritage. Secondly, it is a resource that contributes to the tangible impact of digital heritage collections, by allowing different stakeholders and audiences to freely access and interact with Odeuropa's data, olfactory storylines, and strategies for olfactory storytelling and olfactory heritage science. Thirdly, it contributes to the education and training of cultural heritage professionals in the use of olfactory heritage strategies as well as raises the benefits and value of their implementation.

To address these aims, the knowledge and results of the activities carried out in WP5, WP6 and WP7 informed the development of ***The Olfactory Storytelling Toolkit: a "how-to" Guide for Working with Smells in Museums and Heritage Institutions (OST)***. To accommodate a broad user group, the **OST** is designed as an open-access resource, providing information and best practices for using olfactory storytelling in cultural heritage institutions. The resource is intended to be both practical and theoretical. It combines aspects developed from the state of the art researched by WP5, the historical team of Odeuropa (*Identifying existing smell narratives in museological and heritage practice (T5.2)*) as well as scientific evidence drawn from the interviews and questionnaires conducted by WP6, the olfactory heritage science team (*Assessment study: 'Biases and concerns of olfactory experiences in GLAMs (T6.1)* and *Digital resource reuse: measuring impact of olfactory museology techniques (T6.2)*). The **OST** is coherent with the other public facing deliverables: Demonstrators for Olfactory Heritage (**D4.6**) and Online Encyclopaedia of Smell Heritage (**D5.3**). Deliberate actions were taken to align these tools in terms of content, usability, and design.

2.2 Challenges

The main challenges of developing the **OST** and its connected tasks and deliverables were twofold. The first challenge derives from the overall lack of knowledge surrounding the value and application of olfactory storytelling in GLAMs. Historically, museological and art historical disciplines tend to be ocular-centric, meaning that most of the individuals who are a part of these professions are trained to approach heritage environments and collections with their eyes. [Levent and Pascual-Leone, 2014] They may lack the specific knowledge to detect olfactory narratives, topics, and objects within their collections and may not be accustomed to deliberate sensory engagement with(in) heritage environments. In fact, many conservators are quite cautious about olfactory storytelling, as the incorporation of these methods or the process of preservation for olfactory materials and artefacts can be seen as hazards to the GLAM environment (whether that is the object itself, staff, or visitors). We worked towards resolving this challenge by (1) organising olfactory events that specifically targeted GLAM professionals who had never used olfactory storytelling methods before; (2) conducting interviews with diverse olfactory experts to

better understand the existing challenges and barriers of olfactory storytelling in GLAMs; and **(3)** researching and testing various types of olfactory event design and the risks they pose on heritage spaces.

The second challenge was in the coordination and compiling of the information and knowledge we developed throughout the course of the Odeuropa project as well as making this information accessible to cultural heritage professionals. A considerable amount of research and testing went into the development of Odeuropa's olfactory events (the workshop *Working with scent in GLAMs - Best Practices and Challenges*; the olfactory guided tour *Follow Your Nose! A Guided Tour with Smell*, the workshop *Malodours as Cultural Heritage?*, the urban tour *City Sniffers: a smell tour of Amsterdam's ecohistory*, and the hackathon *Improve Your Olfactory Language (T7.2-T7.6)*) and the deliverables that were connected *Guidelines on the use of smells in GLAMs (D6.1)*, *Questionnaires for Measuring the Value of Introducing Smells in GLAMs (D6.3)*, *Impact Activities Report Year 1 (D7.2)*, and *Impact Activities Report Year 2 (D7.3)*.

In preparation of the **OST** content development, the results of these previous tasks and deliverables were carefully reviewed. To ensure that the content of the **OST** encompassed key learnings from our previous activities and met the needs of our target audience, close collaboration within the Odeuropa team was essential. We ensured this through **(1)** cross work package meetings to identify key outcomes of previous tasks and activities and discuss the best way to incorporate these into the **OST**; **(2)** attendance to workshops and conferences intended for a GLAM audiences as well as inviting GLAM audiences to Odeuropa activities where we could test out different parts of the **OST**; **(3)** the inclusion of external contributions to the **OST** by GLAM professionals; and **(4)** organising a formal external review of the first draft of the **OST** including individuals from the GLAM sector.

2.3 Initial Development and Impact

2.3.1 Impact Activities

The main goals of the impact activities which contributed to the development of the **OST** were firstly to build and activate a diverse network of stakeholders — especially within the cultural heritage sector. Secondly, it was important to collect experiences and concerns from experts already working with scents in GLAMs to better understand what knowledge was lacking in the field. Lastly, we aimed to research, apply, test and evaluate olfactory storytelling techniques for their efficiency. Overall, the impact activities carried out throughout the project gleaned positive results for the **OST**, especially their successful implementation of olfactory and digital methods (applications, demonstrators, databases, digital collections). This brings the results and outcomes of project full circle, ensuring that the **OST** considers all aspects and outcomes of the project when educating GLAM professionals on the best practices and guidelines of olfactory storytelling.

The impact activities outlined and summarised in the Impact Activities Report Year 1 (**D7.1**) and Impact Activities Report Year 2 (**D7.3**) were crucial to the development of the (**OST**). Impact activities refer to Odeuropa's olfactory events as well as various communication, dissemination and exploitation activities. The Odeuropa project organised five olfactory events including three workshops: *Working with scent in GLAMs - Best Practices and Challenges (T7.2)*, *Malodours as Cultural Heritage? (T7.4)* and *Improve Your Olfactory Language (T7.6)*; and two curated events: *Follow Your Nose! A Guided Tour with Smell (T7.3)* and *City Sniffers: a smell tour of Amsterdam's ecohistory (T7.5)*. All these events successfully collected information from stakeholders as well as tested and evaluated olfactory storytelling techniques.

To continue the communication of Odeuropa's goals and expertise to the target audiences of the **OST** and activate this network of different stakeholders, throughout the development of the **OST**, members of the Odeuropa project tested, communicated and evaluated various tools and content as it was being developed. This was achieved via various presentations and publications. Presentations where the **OST** received feedback from stakeholders (GLAM professionals, scent experts, scholars) include [Museum Next Digital Exhibitions Summit \(N= 150\)](#) [Memory of Scent Workshop \(N=42\)](#), [Immersive Media Conference 2023 for the Swedish Heritage Board \(N=60\)](#),



Figure 2: Stakeholders participating in a workshop around the **OST** resource, *The Heritage Scent Design Brief* at the Lorentz workshop, <https://www.lorentzcenter.nl/nose-wise-modelling-smell-as-a-cultural-phenomenon.html> Nose Wise: Modelling Smell as a Cultural Phenomenon in July 2023. Photo credit to Sofia Collette Ehrich.

¹ Europeana Digital Storytelling Festival 2023 (N=160), and the Lorentz workshop, *Nose Wise: Modelling Smell as a Cultural Phenomenon* (N=25). Furthermore, the advisory board was invited to comment on the **OST's** development and vision in May 2023.

Through collaborations with the *American Historical Review*, we were able to create an online teaching module to encourage teachers to use smells and embodied learning in their own teaching practice. Additionally, we were able to test distribution methods via the production of two printed scent cards as well as disseminate and publish early methods and guidelines for olfactory storytelling.²

The Odeuropa project always put the inclusion of GLAM professionals in our impact activities at top priority. Collaboration and discussions with these individuals – our collaborations with Museum Ulm in Germany and the Amsterdam Museum in the Netherlands for example – was another important part of developing the **OST** in a way which meets the expectations of our target audience.

¹View Sofia Collette Ehrich's presentation, *How Can We Smell History? – Mapping Out Modes of Olfactory Event Curation* on the Riksantikvarieämbetet YouTube Channel: <https://www.youtube.com/watch?v=YByb-wbXw6E>.

²see Leemans, I., Tullett, W., Bembibre, C., and Marx, L. (2022). "Whiffstory: Using Multidisciplinary Methods to Represent the Olfactory Past." *American Historical Review*, 127(2), 849-879. https://research.vu.nl/ws/portalfiles/portal/221554457/Whiffstory_Using_Multidisciplinary_Methods_to_Represent_the_Olfactory_Past.pdf and Marx, Lizzie, et al. "Making Whiffstory: A Contemporary Re-creation of an Early Modern Scent for Perfumed Gloves." *The American Historical Review* 127.2 (2022): 881-893. https://research.vu.nl/ws/portalfiles/portal/221553739/Making_Whiffstory_A_Contemporary_Re-creation_of_an_Early_Modern_Scent_for_Perfumed_Gloves.pdf.



Figure 3: Sofia Collette Ehrich presenting the **OST** to a group of stakeholders at the **Memory of Scent Workshop** in October 2022. Photo credit to Inger Leemans.

2.3.2 Impact Measurement

At the start of the Odeuropa project, we understood that many GLAM professionals were not trained to work with smell and that standardised practices and methodologies to do so meaningfully did not yet exist. This lack of knowledge resulted in an overall reluctance to incorporate olfactory storytelling in GLAMs.³ The avoidance of scents in heritage spaces prevented GLAM institutions from taking advantage of the possibilities and benefits that can result from olfactory storytelling. This is where scientific evidence of the value and impact of smell in GLAMs was crucial. Although using scent in GLAM institutions was not a new concept, a methodology for understanding the impact and value of their inclusion had not yet been developed.

To work towards this methodology, the Odeuropa team conducted interviews with olfactory experts and developed questionnaires as part of the impact measurement. Firstly, *Guidelines on the use of smells in GLAMs (D6.1)* outlined the existing barriers and concerns that GLAM professionals have for working with smells. Secondly, *Questionnaires for measuring the value of introducing smells in GLAMs (D6.3)* established scientific standards to measure the impact of olfactory storytelling in heritage environments. Questionnaires were conducted at Odeuropa's own olfactory events as well as those across Europe. We reached over 800 GLAM visitors who described their experiences of engaging with olfactory storytelling. This data was central to the development of the **OST** as it provided significant, scientifically measured results which communicated the potential impact smell has on visitor experience. We were able to incorporate these findings into the **OST** content not only as a way to encourage olfactory storytelling but to also legitimate its impact.

2.3.3 External Review

To legitimise the creation of the **OST**, we organised an external review of the first draft of the contents of the **OST** and its related resources. The reviewers included two GLAM professionals (one familiar with olfactory storytelling and the other unfamiliar with olfactory storytelling), one master's student in the museum and cultural heritage sector who is also a curator, and one founder and director of a non-profit institution dedicated to open access education for perfumery as well as to arranging olfactory art and events for the community.

The external reviewers of the **OST** are listed below (in alphabetical order):

- (1) **Marie Clapot**⁴ is a sensory museologist, disability justice advocate, and associate museum educator for Accessibility at the [Metropolitan Museum of Art](#) in New York City.
- (2) **Emma Giessmann**⁵ is currently completing her Master's in [Cultural Heritage and Museum Studies](#) at Deakin University and working as a curator at [Museums Victoria](#) in Melbourne, Australia.
- (3) **Dr Sarah Grant**⁶ is a Senior Curator in the Art, Architecture, Photography and Design Department at the [Victoria and Albert Museum](#), in London, United Kingdom.
- (4) **Saskia Wilson-Brown**⁷ is the Founder and Executive Director of the [Institute for Art and Olfaction](#) Los Angeles, California, in the United States.

To carry out the review, the reviewers were provided with all the written content and 11 resources of the **OST** as well as an evaluation form to guide their process and feedback.⁸ Reviewers were provided one month to carry out the review. All necessary content of the **OST** was

³See *Questionnaires for measuring the value of introducing smells in GLAMs (D6.1)*

⁴<https://www.researchgate.net/profile/Marie-Clapot>

⁵<https://www.linkedin.com/in/emma-giessmann-648646193/?originalSubdomain=au>

⁶<https://www.vam.ac.uk/blog/author/sarahgrant>

⁷<https://artandolfaction.com/saskia-wilson-brown/>

⁸The **OST** will have consist of a downloadable PDF book that can be downloaded in its entirety. The 11 resources to assist olfactory storytelling projects will be available separately via the Odeuropa website.

provided in a way which was difficult to duplicate or share prematurely. Documents and resources were watermarked and a notice of confidentiality was placed at the beginning of the document as well as in the emails exchanged with the reviewers.

Overall, the review of the **OST** was positive. The reviewers found all the content and resources clear and useful. They all expressed that they would use this information to create their own events. They found the overall choice of language and structure accessible and relevant to the target audiences. Critique was mostly in relation to design, format and usability of the **OST**. Many reviewers expressed that it was difficult to differentiate between chapters and sections as well as the *smell manifestos*, *case studies* and various resources. These concerns will be addressed during the layout design process.

The reviewers provided helpful tips for improvement. Firstly, they suggested improvements in terms of terminology and language, especially for the titles of sections and chapters. Secondly, it was suggested to better differentiate between olfactory art and olfactory storytelling. And lastly, reviewers suggested to create a resource or diagram that helps navigate the **OST** as a whole. The Odeuropa project carefully reviewed the feedback forms and implemented the suggestions.

A few reviewer observations, which we report in their original form:

- (1) “The case studies were quite engrossing (to me at least). I made audible *wow’s* whilst reading and it definitely got me thinking about how I could utilise scent in my own practice. The Tasha Marks and Claire Dobbin case study especially demonstrated how scent is both a deeply personal experience (linked to memory and nostalgia) whilst also being universal (providing new opportunity pathways for engagement and diversity of experiences)”.
- (2) “The resource is very helpful, in particular the statistics you give from your survey of visitors, as the main goal in incorporating olfactory experiences. [It shows] our museum would be able to attract and engage with younger and more diverse audiences (not just our core visitor group) and help to ‘unlock’ our permanent collections in new ways/make our pre-20th-century collections relevant to today’s museum goers”.
- (3) “I am so excited that this will soon become a resource accessible to so many! Congratulations to all of you!”

(see Appendix A for the *Olfactory Storytelling Toolkit Review Form*.)

2.3.4 Case Studies for Inspirational Olfactory Storytelling

One of the challenges of the **OST** was to ensure that the resource is representative of the interdisciplinary nature of olfactory museology. To achieve this, the **OST** includes external contributions from olfactory experts. This provides the opportunity to **(1)** engage with and bring attention to the interdisciplinary network we built from WP7’s impact activities and **(2)** present knowledge that goes beyond the authors of the **OST**. The external contributions are meant to inspire and inform users of the **OST** to use olfactory storytelling in their own practice as well as provide tangible examples of how this has been done successfully in the past.

External contributions to the **OST** were organised by contacting individuals that engaged in Odeuropa’s impact activities (e.g. *Workshop Working with Scent in GLAMs - Best Practices and Challenges (T7.2)*) and GLAM professionals who have experience with olfactory storytelling techniques. A template, which was developed by the Odeuropa team, was sent around to collect meaningful experiences and best practices. (See Appendix B for the *Template for Contributions of Inspirational Olfactory Storytelling*.)

Upon receiving the answers to these templates, members of the Odeuropa team reviewed the answers and organised the information into informative *Case Studies*. In total, we curated six case studies from seven different olfactory storytelling experts. Each case was created and arranged into a relevant section of the **OST**.

Find details of each *Case Study* below (in alphabetical order):

<https://odeuropa.eu>

- (1) **Marie Clapot**⁹ is a sensory museologist and the associate museum educator for Accessibility at the **Metropolitan Museum of Art** in New York City. She contributed the knowledge she acquired through the educational programming she has organized for visitors to the MET. She offered tips that were particularly helpful to better understand how olfactory storytelling can contribute to broadening accessibility efforts. Clapot's case study is part of **OST Section 1: Curating Olfactory Narratives**.
- (2) Freelance curator **Claire Dobbin**¹⁰ and sensory consultant **Tasha Marks**¹¹ worked together on the olfactory exhibition, *London: Port City* at the **Museum of London Docklands** from 2021 to 2022. This case study is presented via a full length interview with the two of them that offers a unique perspective of how a sensory consultant and curator can work together to create a project featuring olfactory storytelling. Marks and Dobbin provided suggestions for developing authentic heritage scents based on lived experiences of a particular community as well as for olfactory exhibition design. Marks and Dobbin's case study is part of **OST Section 2: Creating a Heritage Scent**.
- (3) Olfactory event design expert and scent designer **Jorg Hempenius**¹² has been working on museum olfactory events for many years. This case study outlines knowledge he has collected working on various olfactory event design projects. He provides tips and tricks for choosing a scent distribution method that meets the museum's needs. Hempenius' case study is part of the **OST Section 3: Olfactory Event Design**.
- (4) **Ineke Huysman**¹³ is a senior researcher at **NL-Lab** and the **Huygens Institute for the History of the Netherlands**. She is currently the coordinator for projects around the letters of Constantijn Huygens, Johan de Witt, and Dutch and Frisian Stadtholders' Wives. This case study is based on the knowledge she acquired working on a project called, *Geheugen van Geur* (Memory of Scent). She spoke on behalf of the entire *Geheugen van Geur* team about the experience of recreating Constantijn Huygens' (1596-1687) *Ode de Parfum: To My Mother* (c. 1635). Huysman's case is part of **OST Section 1: Curating Olfactory Narratives**.
- (5) **Lizzie Marx**¹⁴ is an art historian and curator at the National Gallery of Ireland in Dublin. She has worked on various olfactory events including those of Odeuropa. Her case study is based on the knowledge she acquired while co-curating Odeuropa's event *Follow Your Nose! A Guided Tour with Smells* (2021-present) in collaboration with **Museum Ulm** and **IFF**. This case study is presented via an interview where Marx offers her personal experience of working on the project particularly the research she carried out to develop the heritage scents as well as her observations of participants of the tour. Marx's case is placed in **OST Section 3: Olfactory Event Design**.
- (6) **Caro Verbeek**¹⁵ is a sensory art historian and curator at the **Kunstmuseum Den Haag**. She has coordinated many olfactory events. Her case study is based on the knowledge she acquired as the curator and coordinator of the project, *In Search of Scents Lost - Reconstructing the volatile heritage of the avant-garde* which took place at the **Rijksmuseum** in Amsterdam from 2014 to 2019. She covers tips about conducting olfactory guided tours for low-sighted individuals as well as how to create historically informed scents with perfumers. Verbeek's case is placed in **OST Section 2: Creating a Heritage Scent**.

⁹<https://www.researchgate.net/profile/Marie-Clapot>

¹⁰<https://www.linkedin.com/in/claire-dobbin-2a138b224/?originalSubdomain=uk>

¹¹<https://www.avmcuriosities.com/>

¹²<https://www.museumbeleving.nl/>

¹³<https://www.huygens.knaw.nl/en/medewerkers/ineke-huysman-2/>

¹⁴<https://www.codart.nl/guide/curators/lizzie-marx/>

¹⁵<https://research.vu.nl/en/persons/caro-verbeek>

3 Outcome of the OST

This section will outline the final result of the *The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions*. This includes the resource's functionality, content, structure, and key resources.

3.1 Result

The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions (OST) is an open access resource created for conservators, curators, educators, tour guides, museum directors, archivists, librarians, and all others who are interested to work with smells in a heritage context. Its contents are based on the research carried out by members of the Odeuropa project. The guide is an online resource available via the Odeuropa website that provides a basis for cultural heritage professionals to use smell as a storytelling technique within their own curatorial practice. It outlines best practices, procedures and instructions for using olfactory storytelling and it offers a formal methodology for doing so as well as practical, hands on tools that can be easily put to use. Although the overall language of the **OST** is meant for museum curators, different parts of the toolkit will suit the needs of different types of cultural heritage professionals as well as other professionals (scent designers, artists, educators etc.) who would benefit from the use of olfactory storytelling.

Overall, the **OST** provides clear methods – from beginning to end – for bringing an olfactory narrative from the (physical) collection item to visitor engagement. The guide not only presents tips for curating a strong olfactory narrative (and how digital heritage collections can help finding these stories) but also outlines the more practical elements of olfactory storytelling such as sniffing out olfactory objects and spaces with *smellwalks*, best practices for presenting and distributing scents in the GLAM space, and creating heritage scents with a scent designer. We also provide information about how to carry out your own risk assessment in GLAM environments.

D7.4 consists of (1) the public facing and open access resource, *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* (working draft in appendix)¹⁶ and (2) a report outlining the resources methodology and development.

3.2 Functionality

The final result of the **OST** is in the format of an online, downloadable PDF guide with additional resources available to download individually via the Odeuropa website. Providing the **OST** in this format allows users to view the content from different digital devices or print the resources. All content is organised in its own section on the Odeuropa website and is available to download in its entirety or by section. The main guide includes images, diagrams, charts, checklists and informational text to ensure easy reading. The additional 11 resources or “tools” are in the form of printable PDF worksheets, guidelines and resources.

The intended use of the **OST** is to be read via its online PDF as it has interactive components via hyperlinks. The hyperlinks lead to websites of mentioned olfactory events, external resources and online databases, and audio-visual content. Hyperlinks are also used to direct users to the Odeuropa developed resources for the user's own use and exploration.

3.3 Content and Structure

The **OST** is divided into four sections which each contain a series of chapters. The sections and chapters can be read consecutively or individually based on the user's knowledge and goals.

¹⁶the version of *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* included in the appendix is not the resource's final form. On November 28th, 2023, the final and fully designed demonstrator will be launched and fully accessible via the Odeuropa website.

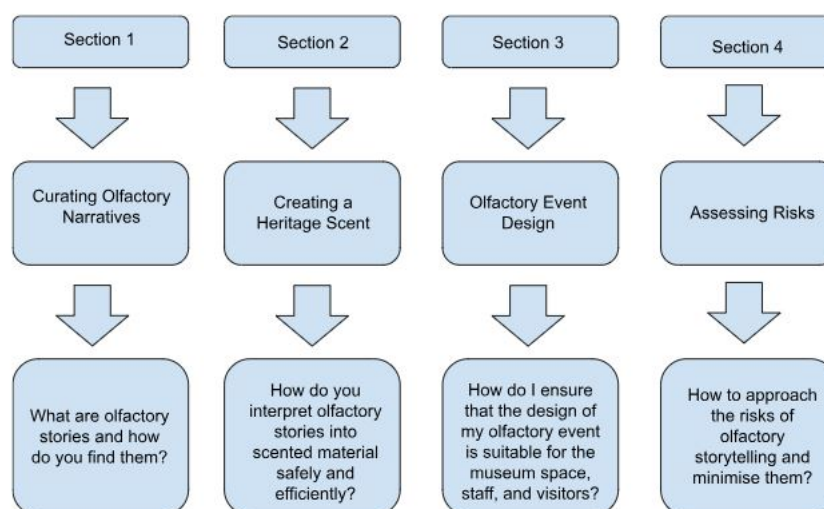


Figure 4: Diagram of an overview of the structure of the *Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions*.

Section 1 - Curating Olfactory Narratives focuses on linking GLAM collections with olfactory storytelling. This starts by defining olfactory narratives and tips on how to find them. The section offers examples of keywords and vocabularies that will help GLAM professionals identify olfactory narratives within digital collections. The section concludes by providing nose-first methodologies - *smellwalks*, a *sniffer in residence*, and *depot sniffing sessions* - for exploring heritage spaces with an olfactory perspective.

Section 2 - Creating a Heritage Scent focuses on bringing the olfactory narrative to the nose of the visitor. The section starts by defining a heritage scent and providing a methodology for identifying them. This section also offers tips for working with various types of scented materials for the use of olfactory storytelling including raw materials, essential oils and custom compositions created by a perfumer as well as the scents that are already in your collections (from olfactory objects or the *smellscapes* of heritage sites). The section also covers how to create a bespoke scent with a scent designer and tips for doing so, which includes addressing topics of authenticity, briefing, and evaluation.

Section 3 - Olfactory Event Design focuses on how to bring an olfactory narrative and heritage scent together to create an engaging visitor experience. The section starts by mapping out the different examples of olfactory event design from olfactory exhibitions to olfactory workshops. The remaining chapters are practical and hands-on, outlining the costs and time involved to create an olfactory event as well as pros and cons of different scent distribution methods.

Section 4 - Risk Assessment focuses on assessing and mitigating risks associated with working with smells in GLAMs. The section outlines initial advice that will help the user to consider the impacts of introducing new volatile organic compounds (VOC) into a museum environment and how to develop strategies to mitigate them. This section furthermore covers guidelines to communicate with the public about the provenance and safety of the chemical compounds used in olfactory storytelling.

Case Studies presenting examples of inspirational olfactory storytelling appear at the end of each section of the **OST**. These showcase how curators, scholars, scent designers and olfactory consultants have used olfactory storytelling in their own practice successfully. Each contribution varies in topic and format and offers personal experiences of the benefits and challenges of bringing scents into the museum.

The full contents of the **OST** is outlined below:

- (1) **Introduction. Scent in the Museum**

(2) **Smell Manifestos**

- (1) *The Persuasive Power of Smell* by cognitive neuroscientist [Jane Plailly](#).¹⁷
- (2) *Honouring the Multifaceted Sense of Smell* by anthropologist and philosopher [Annick Le Gu  rer](#).¹⁸
- (3) *Diary of Smells: Olfaction as an Experiential Medium, 2010-2023* by olfactory artist [Josely Carvalho](#).¹⁹
- (4) *Using Scent to Enhance the Artistic Experience* by perfumer Nadjib Achaibou

(3) **Section 1. Curating Olfactory Narratives: Linking Scents with Collections:**

- (1) **Chapter 1:** How to make connections between your collection and olfactory narratives?;
- (2) **Chapter 2:** How to find olfactory information in digital collections?;
- (3) **Chapter 3:** How can using a sniffer in residence assist achieving a nose-first perspective?;
- (4) **Chapter 4:** How can smellwalks capture the olfactory landscape in and around heritage sites and institutions?;
- (5) **Case Study #1:** Senior Researcher, Ineke Huysman on the Project *Geheugen van Geur* (Memory of Scent);
- (6) **Case Study #2:** Sensory Museologist, Marie Clapot on her Work with Olfactory Storytelling at the Metropolitan Museum of Art, New York

(4) **Section 2. Creating a Heritage Scent:**

- (1) **Chapter 1:** What are heritage scents?;
- (2) **Chapter 2:** How to acquire fragrant materials?;
- (3) **Chapter 3:** Considerations for using malodours for olfactory storytelling.;
- (4) **Chapter 4:** How to develop a heritage scent with a scent designer?;
- (5) **Chapter 5:** How to evaluate heritage scents?
- (6) **Case Study #3:** Sensory Consultant, Tasha Marks (AVM Curiosities) and Freelance Curator Claire Dobbin on *London: Port City* at the Museum of London Docklands (2021/2022);
- (7) **Case Study #4:** Sensory Art Historian and curator Caro Verbeek on the *In Search of Scents Lost* Project (2015-2019)

(5) **Section 3. Olfactory Event Design:**

- (1) **Chapter 1:** What type of olfactory event is right for me?;
- (2) **Chapter 2:** What are the costs of an olfactory event?;
- (3) **Chapter 3:** How to present scents in heritage environments?;
- (4) **Chapter 4:** What are the pros and cons of smell distribution methods?;
- (5) **Chapter 5:** How to manage olfactory events?
- (6) **Case Study #5:** Olfactory Event Design Expert and Scent Designer Jorg Hempenius on Inspirational Olfactory Event Design in GLAMs;
- (7) **Case Study #6:** Art Historian and Curator Lizzie Marx on *Follow Your Nose! A Guided Tour with Smells* at Museum Ulm, Germany (2021-present)

(6) **Section 4. Accessing Risks**

- (1) **Olfactory Storytelling Inspiration 7:** Olfactory Exhibition at Prado Museum, Madrid

(7) **Conclusion**

¹⁷<https://www.crnl.fr/en/user/227>

¹⁸<https://annicleguerer.com/>

¹⁹<https://www.joselycarvalho.com>

3.4 Olfactory Storytelling Resources

Each section of the **OST** has downloadable resources that the user can use for their own olfactory storytelling projects and events. These resources will be available via the Odeuropa website as well as referred to and hyperlinked in the main text.

See below an overview of each downloadable resource:

- (1) **OST Resource 1 - Cards to Design Olfactory Narratives:** This resource helps the user think about how scents link to the items, main themes, and storylines in their collection. The fill-in worksheet is designed for printing and cutting and it offers a series of pro-forma cards that can be filled in and moved around as you wish.
- (2) **OST Resource 2 - Olfactory Keywords:** Digital collections hold a lot of artworks with olfactory relevance, however, many are not equipped with such vocabularies. This resource is a list of smell terms in six languages: Dutch, English, French, Latin, Italian, Slovenian. This list will assist users navigate digital collections, providing them with specific vocabulary words to search for.
- (3) **OST Resource 3 - Nose-First Art Historical Odour Wheel:** This resource offers a fun and simple way for users to find olfactory stories in their collections. The odour wheel starts with scent families in the first ring, which connects to odourants in the second ring, and specific artworks and artefacts in the third ring, ending with an outer ring with [Iconclass codes](#).²⁰ Iconclass is a database that many GLAM institutions use to categorise and name their collection items and metadata.
- (4) **OST Resource 4 - Smellwalk Form:** This resource is a worksheet that the user can use when conducting *smellwalks*. The document helps the leader of the smellwalk participants through the smellwalk process and what to reflect on. This *smellwalk* form was developed by Victoria-Anne Michel as part of her PhD research in the Odeuropa Project.
- (5) **OST Resource 5 - Smellwalk Guidelines:** This resource is to be used for carrying out *smellwalks* in and around heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct *smellwalks*.
- (6) **OST Resource 6 - Heritage Scent Design Brief:** This resource is a form that assists cultural heritage professionals, historians, and researchers in the process of making a scent for the use of olfactory storytelling. It outlines all the information necessary for a scent designer/perfumer to make a smell interpretation intended for the use of olfactory storytelling. This brief is part 1 of a 2 part scent development process.
- (7) **OST Resource 7 - Heritage Scent Design Brief Example:** This resource is a completed *Heritage Scent Design Brief* (OST Resource 6) for Odeuropa's *Liberty Bell Smell*. The resource is meant to assist the user's own completion of a *Heritage Scent Design Brief*.
- (8) **OST Resource 8 - Heritage Scent Development Report:** This form provides the opportunity for the scent designer to reflect on the creation of a scent intended for olfactory storytelling. This includes the process and the materials used for the smell creation. The document is to be filled out by the scent designer. This report is part 2 of a 2 part scent development process.
- (9) **OST Resource 9 - Heritage Scent Development Report Example:** This resource is a completed *Heritage Scent Development Report* (OST Resource 8) for Odeuropa's *Liberty Bell Smell*. The resource is meant to assist the user's own completion of a *Heritage Scent Development Report*.

²⁰<https://iconclass.org/>

- (10) **OST Resource 10 - Guidelines for Evaluating Heritage Scent Creations:** This resource provides different guidelines for evaluating heritage scent creations made for the purpose of olfactory storytelling in GLAMs. We propose three different evaluation schemes: an isolated evaluation, a contextualised evaluation, and a peer review evaluation.
- (11) **OST Resource 11 - How to Conduct Olfactory Guided Tours:** This resource is a guideline and instructional guide for conducting olfactory guided tours in heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct olfactory tours.

The first draft of *The Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions* is included in Appendix C. This contents of this document will remain the same, however, it will change in design and usability.

4 Communication, Dissemination and Exploitation Strategies for the Olfactory Storytelling Toolkit

Our plan for the communication, exploitation, and dissemination of the **OST** involves the following steps:

- (1) **The Launch of the OST:** Originally, the **OST** was to be launched and presented to stakeholders in a nose-on, educational workshop. For optimal dissemination and exploitation efforts and to ease organisation, the consortium agreed to launch the **OST** in combination with the *Entrepreneurial Hackathon (T7.10)*. The event, which we labeled the **Smell Culture Fair** will take place on November 28th, 2023 in Amsterdam, the Netherlands at the historic Trippenhuis building. Combining these two events heightens their impact on the target audiences and as the *Entrepreneurial Hackathon (T7.10)* aimed to present all the Odeuropa tools together (*Demonstrators for Olfactory Heritage (D4.6)*, *Online Encyclopaedia of Smell Heritage (D5.3)*, and the *Olfactory Storytelling Toolkit (D7.4)*), combining the events will further exemplify the variety of possible users of these tools and how they can be used together.

The event on November 28th will welcome 140 participants from our target audiences. We aim to include 40 individuals from the GLAM sector, 40 individuals from the scent industry, scent technologies and flavor analytics, 20 individuals from research and education, and 10 individuals from press and media. We expect around 30 members of the Odeuropa Project to attend the event. The day will include informational panels, training sessions, Q and As, and panel discussions. The OST will play an important role in the training sessions which will directly target GLAM professionals who want to learn more about olfactory storytelling. Furthermore, the **Smell Culture Fair** is organized as a matchmaking event. At the exposition part of the fair, GLAM professionals can engage with perfumers, scent marketing companies and other possible partners for future multi-sensory events. Thus, the legacy of the Odeuropa project can support and be in conversation with future collaborations around olfactory museology.

The Cultural Heritage Policy Roundtable (part of *Policymaking: olfactory heritage as intangible heritage (T7.7)*) will follow the **Smell Culture Fair** on November 29th. A targeted audience of 30 heritage policy makers will discuss the value of olfactory heritage and sensory heritage as a whole.

- (2) **Communication of the OST:** The launch of the **OST**, will be communicated through various outputs. It will be presented via a formal press release, the Odeuropa Newsletter (N=500), the Odeuropa X channel (N=1660+ members), the social media channels of the Odeuropa members, and through targeted newsgroups (*NEMO*, *Museum Contact*, the *NOSE Network*, and *Europeana*). The GLAM professionals who have collaborated on the **OST** function as

an additional layer of communication through their use of social media towards our target stakeholder groups.

- (3) **Dissemination of the OST:** As explained above, over the course of the Odeuropa project, we disseminated parts of the **OST** through hands-on presentations and publications reaching over 500 participants. We will continue this practice both within the scope of the project and beyond. Apart from the **OST** training sessions at the *Smell Culture Fair*, we aim to present the **OST** at ICOM-CC 20th 2023 conference (paper accepted for the Theory, History and Ethics of Conservation group), at NEMO European Museum Conference 2023 (proposal in progress), and at SITEM 2024 (International trade show for museums, cultural venues and tourist sites - proposal in progress). We aim to outline the development of the OST in a research paper.

To assure easy use and dissemination of the **OST**, we will make a short video which explains the goals and main components of the **OST**. The video will be hosted in the **OST** web environment and on the Odeuropa YouTube channel. The **OST** website (www.odeuropa.eu) will be hosted by the KNAW for at least 5 years after the conclusion of the project. The data will also be stored at the KNAW DANS repository.

- (4) **Exploitation of the OST:** With IFF, Odeuropa is preparing a smell box, the *Odeuropa x IFF Historical Scent Collection*, with a dozen of the most significant heritage scents that Odeuropa researched and developed. This box will include a leaflet that refers to the methodologies of Odeuropa and how the **OST**, supports them. 150 of the smell boxes will be distributed during the *Smell Culture Fair* and *Policy Roundtable*. The remaining kits will be sent to our stakeholder communities, specifically GLAMs with an interest in multi-sensory storytelling. The box - in addition to its clear connection with the **OST** - can be an easy starting point for future olfactory events in their institutions and to enhance the impact of their collections.

In 2024, in collaboration with the [Amsterdam Humanities Hub](#), Odeuropa will organise a multi-sensory dinner for targeted stakeholders that assures the exploitation of the OST in future projects. Furthermore, we are preparing for an Innovation Action proposal in the Horizon Europe Cultural Heritage and Creative Industries domain. In this future project we can further test and refine the **OST**.

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A Olfactory Storytelling Toolkit Review Form



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FEEDBACK FORM

For reviewers of the Odeuropa Olfactory Storytelling Toolkit

Titles and Subtitles

Is the title of the toolkit, *The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in Museums & Heritage Institutes*, clear? Does it well communicate its contents? If not, how can we improve it?

I think the title and subtitle give a clear idea of the content.

Are the section titles clear and representative of what they will discuss? Why or why not?

Would you recommend different terminology? (write your answer)

Introduction:

this works

Section 1: Assembling Olfactory Narratives - linking scents with heritage collections.

Instead of "assembling" i would maybe use "Developing/Curating" ut the subtitles do break it down well so i think it works

Section 2: Heritage Scent Development

it feels a little vague but i can 't suggest anything else. Again i think the subtitles/sections do explained what it is well

Section 3: Olfactory Event Design

this works

Section 4: Risk Assessment **(note that the Risk Assessment section is not included for your review)**

Content:

Is the toolkit well structured? (on a scale of 1-5, 5 being the most positive response)

1 2 3 4 5

Notes: I like that the manifestos provide an expansive theoretical and aesthetic framework.

I just feel that it is lot to go through prior to getting to the Introduction. i wonder if including one manifesto in between each big section would provide both a visual and content transition?

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Angewandte
Kulturwissenschaften



Jozeef
Stefan
Institute



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Is the language appropriate for our audiences?¹ (on a scale of 1-5, 5 being the most positive response)

1 2 3 4 **5**

Notes: I found the language to be quite accessible and clear.

Is the content easy to read (accessible)? (on a scale of 1-5, 5 being the most positive response)

1 2 3 4 **5**

Notes:

After reading Odeuropa's Olfactory Storytelling Toolkit, do you feel well equipped, instructed and inspired to carry out your own olfactory event? Why or why not? (on a scale of 1-5, 5 being the most positive response)

1 2 3 **4** 5

Notes: As someone who is familiar with the process, it provided me with a clearer roadmap and new tools.

I can imagine that as someone new to olfactory storytelling, it is a lot to digest. I wonder if having some type of checklist as an appendix might help guide people in their endeavor and thus help them navigate the toolkit even more effectively.
or it could be a template that helps me define what type of olfactory event they are considering and what are the steps to take?

After reading Odeuropa's Olfactory Storytelling Toolkit do you feel you are aware of the challenges and risks of olfactory storytelling?

(on a scale of 1-5, 5 being the most positive response)

1 2 3 4 **5**

Notes: I am certain people will encounter their own challenges that are specific to their institutions but I feel that the toolkit highlighted many of them.

¹ the stakeholders we want to address encompass an international audience of professionals working in or with GLAMs (Galleries, Libraries, Archives, Museums) and the wider cultural sector.

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Suggestions for improvement

Introduction: I think it explained the toolkit very clearly and concisely and helped me better understand what each section would focus on and how to find the information i need.

Section 1: Content Curation - linking scents with heritage collections.

Section 2: Heritage Scent Development

Section 3: Olfactory Event Design

Case Studies from Ineke Huysman, Tasha Marks & Claire Dobbin, Jorg Hempenius, and Marie Clapot

Are the chosen case studies clear and informative? I think they work. I feel like they would be easier to read and take in if they were different that the rest of the toolkit in terms of design.

Do the chosen case studies inspire you to create and implement your own olfactory storytelling? yes, i think like it also helps connect to people who are workign directly with scents

Comments on improvement

Additional Feedback:

Overall, is the content practical and helpful for the audiences we want to address?
absolutely, i love that it is an online document with hyperlinks leading to other resources

Is there additional content that would help you gain support or funding for an olfactory event within your organisation?

Overall, is this resource representative of the field of olfactory events/olfactory museology/curation as a whole? Does the resource communicate as inclusive of different voices?

While some are mentioned (Tasha Marks, Josely Carvalho,.. a section on olfactory artists, their processes, tips for GLAMs to display their work... would be great.

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Can you think of any references/individuals/events that you feel should have been mentioned or highlighted? **No**

Is there any additional content that you would expect to see in this resource?

Complementary resources and tools (downloadable worksheets, guidelines, etc):

Worksheets Section 1: (bold or respond your chosen answer)

- **Worksheet Storyboarding. Smell Cards to Design Olfactory Narratives (OST Resource 1)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes for improvement:
- **Resource Olfactory Keywords (OST Resource 2)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes for improvement:
- **Printable Odeuropa Nose-First Art Historical Odour Wheel (OST Resource 3)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes for improvement:
- **Smellwalk Form (OST Resource 4).**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes for improvement:
- **Resource for Using Smellwalks for Olfactory Storytelling (OST Resource 5)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes:

Worksheets Section 2: (bold or respond your chosen answer)

- **Worksheet Heritage Design Brief (OST Resource 6)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**
 - Notes:
- **Example of Heritage Design Brief (OST Resource 7)**
 - This worksheet was clear and understandable: **yes/no**
 - I would use this for my own olfactory event: **yes/no**

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<ul style="list-style-type: none">○ Notes:● Worksheet Heritage Development Report (OST Resource 8)<ul style="list-style-type: none">○ This worksheet was clear and understandable: yes/no○ I would use this for my own olfactory event: yes/no○ Notes:● Example of Heritage Development Report (OST Resource 9)<ul style="list-style-type: none">○ This worksheet was clear and understandable: yes/no○ I would use this for my own olfactory event: yes/no○ Notes:● Worksheet Guidelines for Evaluating Heritage Scent Creations (OST Resource 10)<ul style="list-style-type: none">○ This worksheet was clear and understandable: yes/no○ I would use this for my own olfactory event: yes/no○ Notes: <p>Worksheets Section 3: (bold or respond your chosen answer)</p> <ul style="list-style-type: none">● Guideline How to Conduct Olfactory Guided Tours (OST Resource 11)<ul style="list-style-type: none">○ This worksheet was clear and understandable: yes/no○ I would use this for my own olfactory event: yes/no○ Notes:
<p><u>Any further comments?</u></p> <p>...</p>

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B Case Study Template for Inspirational Olfactory Storytelling



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Template for Contributions of Inspirational Olfactory Storytelling

Proposed by Sofia Ehrich
February 20th, 2022
The Odeuropa Project

Person:

Focus Topic:

Olfactory Event:

Contact:

This document outlines the information Odeuropa would like to collect from you for the purpose of the Olfactory Storytelling Toolkit *Contributions of Inspirational Olfactory Storytelling*. The individuals and the projects were carefully selected for the unique expertise they showcase and the ability for them to provide realistic and practical examples of olfactory storytelling in GLAMs.

The information we ask is not rigid. You may adapt the components in a way which suits your own olfactory event example. If a question does not apply to you, indicate this by writing "not applicable." If you do not have the answers to a question, provide the information which you do have and we can evaluate later.

Note: The content published in the final version of Odeuropa's Olfactory Storytelling Toolkit may differ from the answers provided due to space and content limitations. Odeuropa will allow you the opportunity to look over the content before publishing. Odeuropa also promises to spotlight you/your company with a visible logo in the final version of the Olfactory Storytelling Toolkit. Please make sure to provide us with appropriate logos, institution titles, headshots etc. so we can do this correctly and effectively.

Practical information about person (necessary):

- Headshot
- Full Name
- Job title/Position
- Company
- Logo (if applicable)
- A few examples of projects you have done with olfactory storytelling

Practical information about Olfactory Event (necessary):

- Name of event:
- Type of event:
- Dates:
- Project timeline/development duration:

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- GLAM name:
- GLAM website:
- Average number of visitors:
- Logo (if applicable)
- Photograph of the outside of GLAM
- Link to exhibition:
- Geographic Location:

Information about smells:

- Smell object(s) presented (if applicable):
- Distribution method(s) of smells(s) (if applicable):
- Number of smells presented:
- Names and descriptions of smell(s) (optional):
- Smell designer(s) and/or Company that created the smell(s) (if applicable):
- How did you store the smell(s) in the GLAM space (if applicable):

Possible Visual aids to include (provide at least one of these):

- Photographs/diagram of smell distribution
- Photographs of olfactory event layout
- Photographs of visitors smelling
- Photographs of scent development

Evidence of visitor feedback:

- Link to reviews of the exhibition (trip advisor, website):
- Any available quotes from visitors

Evidence of GLAM professional feedback:

- Any available quotes from the GLAM staff?

Optional content:

- Video of the event (2 minutes)

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Interview Questions: (each answer a maximum of 300 words in complete sentences)

On overall effect:

- What was the main goal(s) of the olfactory event's use of olfactory storytelling? (educational, historical, anecdotal, etc.) Please elaborate on these goals.
- If you could offer one piece of advice to GLAM professionals who want to use olfactory storytelling, what would it be?
- Did you (or the guards, tour guides, staff) observe different/unusual behavior from different target groups (ex. children, adults etc)? Did they respond to the smells and the space differently?

On event design and smell distribution:

- Were other modes of sensory engagement used (ex. audiovisual content)?
- What was the biggest challenge of the smell development process and how did you "evaluate" if the smell(s) suited their function?
- How and why did you choose your chosen method of smell distribution?
- Did you include malodors in your event? If so, were there any notable responses?

On olfactory storytelling curation:

- What was the biggest challenge of using olfactory storytelling and how did you solve it?
- How and why did you choose the subjects/topics interpreted into olfactory storytelling?
- Were olfactory storytelling techniques used to engage those with other abilities? If so, how?
- In your experience, how does engagement with smells contribute to worthwhile storytelling in GLAMs?
- What order did you present the smells and why? (For example, taking care not to finish with a malodour or starting with an explanation and then handing out a smell)

On safety and conservation:

- What steps/precautions did you take to ensure a safe experience for the GLAM's staff, visitors, space, and collection?
- Why is it important to safeguard and showcase elements of olfactory heritage in GLAM institutions?
- How did you ensure that all the involved staff was cooperative in the incorporation and design of olfactory storytelling?

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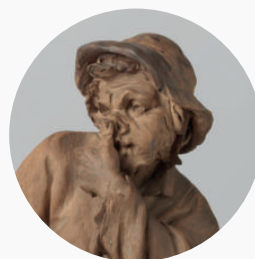


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101004469.

C *The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in Museums and Heritage Institutions*

OLFACTORY STORYTELLING TOOLKIT

*A 'how-to' Guide for Working with Smells
in Museums & Heritage Institutes*



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Victoria-Anne Michel is a PhD candidate within the Odeuropa project. Her research focuses on the interconnections between smells, users, spaces, and representations in GLAMs (galleries, libraries, archives, museums) and heritage sites. Using textual analysis and smellwalks, she aims to retrace and contextualize the olfactory narratives mentioned by visitors and GLAMs professionals, eventually exploring how smells participate in our making sense of place.

Dr. Lizzie Marx, National Gallery of Ireland

Lizzie Marx is Curator of Dutch and Flemish Art at the National Gallery of Ireland. She received her doctorate at the University of Cambridge with the thesis *Visualising, Perceiving, and Interpreting Smell in Seventeenth-Century Dutch Art*. On the Odeuropa project, she worked on using AI to source historic imagery related to smell, and incorporating the olfactory in museum and heritage initiatives.

Introduction: Scent in the Museum



Scent in the museum. For a long time, this phrase would have raised red flags for conservators, curators, archivists and visitors of heritage spaces - and in many cases it still does. Scents? Where? Surely not in the galleries or in the depot?! Do they indicate undesirable moulds in books or other objects? Are odours spilling from the restroom or the museum café? Do these scents suggest the presence of airborne dangers that might affect the artefacts? Recognised as a hazard or simply lurking in the background, visitors and heritage professionals alike are not accustomed to actively paying aesthetic attention to smells in cultural heritage institutions. Scents are assumed to be incidental, unintentional, and unwanted.

Recently, we find ourselves in a *scent renaissance* where “odourphobic” attitudes are slowly giving way to practices of *olfactory storytelling* in the cultural sector. Motivated by a desire to create more immersive experiences and to diversify the narratives told and the audiences reached, GLAMs (galleries, libraries, archives, and museums) are discovering that smells and our olfactory sense are both powerful tools for storytelling and for the presentation of heritage objects and spaces. These ‘olfactory turns’ in the world of art and culture have come and gone over the years. The early 20th century played host to the artistic olfactory experiments of the Futurist [Filippo Tommaso Emilio Marinetti](#) and the Dadaist [Marcel Duchamp](#). At the end of the 20th century a rush of smell culture writings by [Alain Corbin](#), [Anthony Synnott](#), [Constance Classen](#), and [David Howes](#) appeared. Additionally, in 1990, the [Osmothèque](#) was founded in Versailles, France, and remains the world’s only perfume archive, safeguarding over 3000 perfumes. In recent years, olfactory art and artists have gained traction. Pioneers such as [Oswaldo Maciá](#), [Ernesto Neto](#), [Clara Ursitti](#), and [Sissel Tolaas](#) have played a huge role in pushing smell into the cultural mainstream.

But the current *scent renaissance* has truly gained momentum in the last decade, turning scent from a medium traditionally associated with beauty and cosmetics (perfumery) or health and wellness (aromatherapy) to an increasingly accessible resource for art, storytelling, and curation. Non-profit organisations like the [Institute of Art and Olfaction](#) (Los Angeles, USA), [Aftel Archive of Curious Scents](#) (Berkeley, USA), and [Smell Lab Berlin](#) (Berlin, Germany) provide open access perfume organs and classes that help beginners become familiar with the art of perfume making. The opening of Andreas Keller's [Olfactory Art Keller](#) gallery, which opened in 2020, opened new avenues for olfactory artists to showcase their experimental and unconventional art. The artistic and academic elements of the *scent renaissance* have frequently connected with each other: Andreas Keller is both a member of the art world and a published philosopher.

Museums and heritage sites around the world have also warmed to the idea of curating with scent. Exhibitions that evoke the experience of smelling have proliferated: [If There Ever Was](#) (2008), [The Art of Scent](#) (2012), [Inhaling Art](#) (2014-2017), [There's Something in the Air - Scent in Art](#) (2015), [Belle Haleine - The Scent of Art](#) (2015), [Die Bibliothek der Geruche](#) (2017), [The Museum of Smells](#) (2018), [Quei Flair! Odeurs et Sentiments / Scents and Feelings](#) (2019-2020), [Queens of Egypt](#) (2019), [Fleeting - Scents in Colour](#) (2020-2021), [Odeur](#) (2021), [Smell It!](#) (2021), [L'Odyssee Sensorielle](#) (2021-2022), [London: Port City](#) (2021-2022), [Es-Senze](#) (2022), [Respirer L'Art](#) (2022-2023), and [Sensational Books](#) (2022) are just the top notes of a varied bouquet of olfactory exhibits. With these exhibitions, visitors were able to smell a wide array of smells with various intentions in mind. Some examples include historically informed or *heritage scents*. These include the smellscape of a [17th century grocer's shop](#) at the [Mauritshuis Museum](#), the smells of London's docks that were recreated in a collaboration between local families and the [Museum of London Docklands](#), and the [reconstruction of Cleopatra's perfume](#) at the [National Geographic Museum](#). Some employ scent as a more immersive medium, such as the ambient nature smells which were disbursed at the *L'Odyssee Sensorielle* exhibition at the [Museum of Natural History](#) in Paris, France.

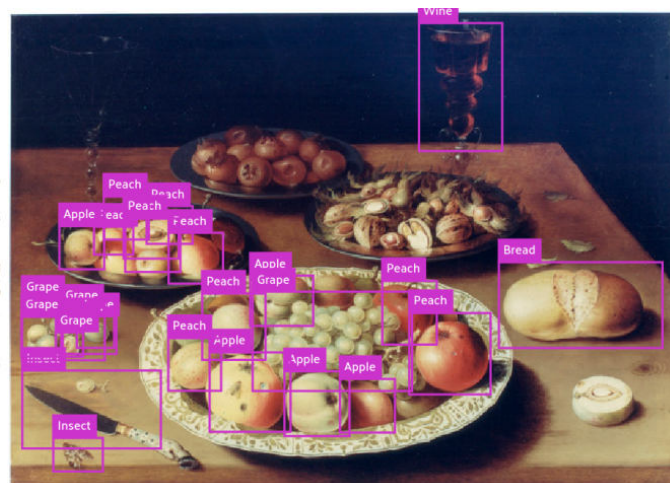


Caption: Museum Ulm's flyer for *Follow Your Nose!* created by Studio Erika. Image courtesy of Museum Ulm.

These examples show that smells can be employed in different ways and within different heritage institutions: art galleries, (natural) history museums, libraries, archaeological sites, or (perfume) archives. They also demonstrate that scents in heritage contexts can come in many forms. They can materialise as olfactory artworks. They can be recreated from historical recipes (household medicines, pomanders, embalming powders), presented as interpretations of historical smellscapes (a Victorian street, a bell foundry) or offered as entries into the world of intangible heritage practices and crafts (incense burning, jenever distillation). These olfactory presentations can play different roles: from creating immersive experiences to historical sensations - learning about art and history through the senses and highlighting the function of objects that were not just meant to just be seen but also to be *sensed*.

The growing popularity of olfactory storytelling in a heritage context also comes with challenges. Curators may want to find olfactory subjects in their collections or employ scents as a storytelling technique but are unsure about how or where to begin. In the Western world, we are trained to approach the world with our eyes before our other senses. This has conditioned people's behaviour in many cultural and communal spaces. It means an eye-first approach takes precedent with little encouragement to use our other senses. Approaching GLAM environments nose-first raises many questions about the practice of olfactory storytelling. How do you find relevant olfactory stories for your institute? How can (digital) collections inform these decisions? How can you curate and present unique olfactory objects found within your collection? Does your institute have a significant smellscape and how would one preserve this fleeting type of heritage? How do you acquire and develop *heritage scents* and how do you incorporate them into your space? What resources are necessary to make an olfactory exhibition or (guided) tour happen? And what is the projected impact of your olfactory event? How do you diffuse or conserve scents safely and properly and if you do, are there possible threats to your collections and visitors? This guide aims to provide some - though not all - of the answers to these questions.

The Odeuropa Project

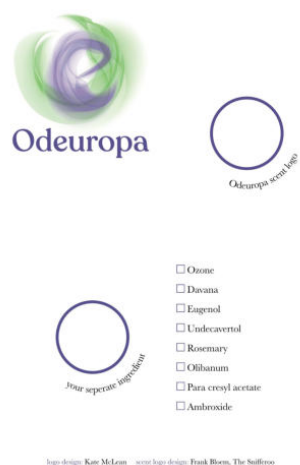


Caption: Example predictions of smell-related images from the object detection models developed by the Odeuropa Project's computer vision team. Photo courtesy of the Odeuropa Project.

These are some of the questions that have driven the members of the Odeuropa project over the last three years (2020-2023). *The Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions* is just one of a set of resources produced by the Odeuropa project as a result of research within the field of olfactory heritage. These outcomes support the project's main argument: that critically engaging our sense of smell and our olfactory heritage is an important and viable means for connecting and promoting Europe's tangible and intangible cultural heritage. This mission was achieved by focussing on different strategies throughout the duration of the project.

First, we developed innovative artificial intelligence methodologies for ‘sensory mining,’ so we could capture olfactory information from digital European heritage collections. This data, which brings together a large number of historical text and image collections, can be accessed via an open access searchable tool: the [Odeuropa Smell Explorer](#). The Smell Explorer provides a gateway to our rich olfactory past and provides a platform for curious individuals to find paintings and prints that depict sensory scenes alongside historical texts that recount the smell experiences of past ‘nose witnesses.’ You can learn more about how Odeuropa connects computer vision techniques to finding olfactory narratives in digital European heritage collections [here](#).

This olfactory information is also curated into entries and storylines in the *Odeuropa Encyclopedia of Smell History and Heritage*. Here experts from smell studies have contributed entries on smells, noses, smellscape, and olfactory objects. These entries help narrate the value of olfactory heritage, discovering how scents have moulded our communities and traditions. The *Encyclopedia of Smell History and Heritage* also contains storylines in the form of multilineal digital narratives that allows users to explore the European past by following their noses. Both the [Odeuropa Smell Explorer](#) and *Odeuropa Encyclopedia of Smell History and Heritage* were developed to educate and inform GLAM professionals, scent designers, scholars, and the public on Europe’s olfactory history and to increase accessibility to this knowledge.



Caption: (Left) The Odeuropa olfactory logo. The visual logo was designed by Dr Kate McLean and the olfactory logo was designed by Frank Bloem ([The Snifferoo](#)).

Caption: (Right) Frank Bloem preparing the olfactory logo in his studio. Photo credit Marieke van Erp.

In preparation for developing Odeuropa’s *Olfactory Storytelling Toolkit: A ‘how-to’ Guide for Working with Smells in GLAMs and Heritage Institutions*, we also curated various olfactory events and projects such as [nose-on workshops](#), [olfactory guided tours](#), [rub and sniff cards](#) and even an [olfactory logo](#) (by [The Snifferoo](#)), which have all presented heritage scents to the *public’s noses*. Through these events, we were able to develop, test, and document different methodologies for olfactory storytelling and create a better understanding which of these worked best within different contexts. In the case of Odeuropa’s methodology for the *Olfactory Storytelling Toolkit*, the use of olfactory storytelling aligns with the examples above. This means the careful orchestration of scents and the activation of our sense of smell are used in a meaningful way to connect to the GLAM environment, collection, and historical concepts of heritage practices, places, and objects.¹ Olfactory art is an important part of the incorporation of scents in GLAMs and olfactory artists have contributed greatly to innovation and creativity in this field, however, to retain a focus for this resource we do not include olfactory art within our scope.

It is important to mention that using olfactory storytelling in GLAMs is not a new concept, a methodology to understand the impact and value of their inclusion however has yet to be developed. This is where Odeuropa’s creation of scientific standards to measure the impact of olfactory storytelling in heritage environments becomes crucial. Through questionnaires and interviews we reached over 800 GLAM visitors who were willing to describe their experiences of olfactory events. Both the events and the data we collected from these questionnaires were central to the development of the *Olfactory Storytelling Toolkit*.

What is the Impact of Olfactory Storytelling?

From the interviews and questionnaires we conducted with over 800 individuals who visited GLAMs across Europe, we learned that olfactory storytelling has a considerable impact on visitor experience. Embracing multisensory approaches and olfactory museological techniques offers innovative visitor experiences that attract diverse visitor groups and leads to a considerable rise in visitor participation. In general, every target group seems to have benefited from smelling as an additional means of storytelling. Nearly 90% of those interviewed at olfactory museum events stated that adding smells made museum visits and heritage tours special. 75% specified that they felt more immersed in the heritage objects and stories when scents were used. A considerable number stated that they would be willing to pay more for a visit if it included smells.



Caption: Results from the Odeuropa impact questionnaires. These charts show the answers to the statement ‘The smells made the tour/visit special’ (sample of 201 questionnaires).

¹ This definition is based on the writings found in Nina Levent and Alvaro Pascual-Leone’s, *The multisensory museum: Cross-disciplinary perspectives on touch, sound, smell, memory, and space* (2014).

Caption: Results from the Odeuropa impact questionnaires. These charts show the answers to the statement 'I would like to experience more tours with smell in the future' (sample of 201 questionnaires).

<i>'Follow your nose! A guided tour with smell', Museum Ulm</i>
The tour was good.
Just keep doing it
Very exciting and vividly presented .
Very interesting, invigorating!
Very interesting . Many thanks!
Wonderful guided tour.
Information and stories from the tour guides were very interesting, good design .
Informative = very detailed .
It was great!
A wonderful tour (and idea!). Many thanks!
Everything fine, I'd love to stay longer than 1 hour.
Everything is wonderful!
Everything was fine, very well prepared .
It was super!

Caption: General positive comments for *Follow your Nose! A Guided Tour with Smell* at Museum Ulm (2021-2022) (sample of 81 responses).

The data also implies that engaging with olfactory storytelling in a heritage context can raise vivid memories and strong emotions. Visitors expressed that they felt particular emotions, including happiness, anxiety, and sometimes overwhelm, when engaging with the scents. However, in general they felt more connected to the past, the institution's collection, and to other visitors. It is also clear that olfactory storytelling not only achieves more immersive visitor experiences, but also has a strong educational value. A large majority stated that interaction with the scents helped them to better understand the artworks, the heritage objects, and the spaces.

Odeuropa's evaluation highlights that olfactory storytelling is inclusive, shapes a sense of community, and offers an innovative tool that the cultural sector can use to engage audiences. Museums and archives are redefining their roles as institutions that serve society and are rethinking their processes of researching, collecting, conserving, interpreting, and exhibiting tangible and intangible heritage. Using olfactory storytelling and supporting olfactory heritage can offer us new gateways to the past. It can help to narrate less documented histories, cultural practices that have left few materials objects, or that were never considered valuable enough for conservation.



Caption: Olfactory artwork by artist [Romuald Hazoumé](#), *La Bouche du Roi*, as part of the [Slavery](#) exhibition at the [Rijksmuseum](#), Amsterdam, Netherlands in 2021. Photo credit Sofia Collette Ehrich.

As we have already suggested, using scent in GLAMs has a long list of benefits. Olfactory storytelling can enhance the educational value and enjoyment of cultural heritage (institutions). Smells can trigger affective responses and mnemonic relations, foster community values, and promote diversity and well-being. Visitors become more attentive and start to notice different details in paintings and objects. Smelling also makes people more talkative. Smell is a mode of communication, and quite democratic: most of us 'know' just as much about smell as the other person. Therefore visitors feel comfortable to engage in conversations with others, exchanging memories, feelings and knowledge, and appreciating input by other participants. Smells can make visitors appreciate the 'world' of others, no matter how different they are.

Scent can help to narrate dark, but essential, sides of our past, present and future - such as the history of slavery, colonialism, capitalism, and climate change. A powerful example of this is the slave ship *La Bouche du Roi* (2007) that was exhibited by Romuald Hazoumé in various museums. A composed scent of tobacco, spices, human urine and faeces, which was a part of the artwork, helped to materialise the horrid conditions in a slave ship and make these more tangible. Although invisible and hard to grasp, smell can be extremely powerful. It is often overlooked, but plays an essential role in our cultures and personal lives.

How to use this toolkit?

Odeuropa's *Olfactory Storytelling Toolkit: A 'how-to' Guide for Working with Smells in GLAMs and Heritage Institutions* is created for conservators, curators, educators, tour guides, museum directors, archivists, librarians, and all others who are interested to work with smells in a heritage context. This guide is a resource that provides a basis for cultural heritage professionals to use smell as a storytelling technique within their own curatorial practice. Throughout the text it may seem as if the language and structure of the information is geared towards curators. However, we believe that different parts of the toolkit will suit the needs of different types of cultural heritage professionals. It is important to note that we will often use the word 'museum' or 'heritage institution' to represent all GLAMs (galleries, libraries, archives, museums).

The guide provides methods - from beginning to end - to bring an olfactory narrative from the (physical) collection item towards visitor engagement. The guide not only presents tips for building a strong olfactory narrative (and where to start finding those stories) but also outlines the more practical elements of olfactory storytelling such as *sniffing out* olfactory objects and spaces with *smellwalks* and a *sniffer in residence*, best practices for presenting and distributing scents in the museum space, creating (heritage) scents with a scent designer and how to carry out your own risk assessment in GLAM environments.

The toolkit is divided into four sections which each contain a series of chapters. **Section 1 - Curating Olfactory Narratives** covers what olfactory stories are and how to find them. This section will equip you with keywords and vocabularies that will assist you in finding narratives within your digital and physical collections. It will also provide guidance on nose-first methodologies for finding olfactory spaces and objects within your institution. **Section 2 - Creating a Heritage Scent** provides detailed information about how to work with a scent designer on the creation of a heritage scent. This includes defining what a heritage scent is, considering how to address authenticity, briefing the scent designer for the creation of the scent, and evaluating the scent creation for its desired impact. **Section 3 - Olfactory Event Design** explores the different types of olfactory events that are available to you together with some examples. This section is practical and hands-on. It helps you choose an olfactory distribution method that works best for your event and space. After reading section 1, 2 and 3, you should better understand how to select a collection item, develop an olfactory narrative around it, produce a related scent, and successfully present it to a public audience. **Section 4 - Risk Assessment** focusses on assessing and mitigating risks associated with working with smells in GLAMs. Here you will find some initial advice that will help you to consider the impacts of introducing new volatile organic compounds (VOC) into a museum environment and develop strategies to mitigate them. This section also covers guidelines to communicate with the public about the provenance and safety of the chemical compounds used in olfactory storytelling.

Inspirational Content

In addition to the four sections, we have included inspirational content along the way that we hope stimulates and encourages you to not only value your sense of smell but also to trust it as a means for

learning and engaging with your surroundings. Just after this introduction, we have four *smell manifestos* which were commissioned especially for Odeuropa. We invited olfactory artist [Josely Carvalho](#), philosopher [Annick Le Guéerer](#), perfumer Nadjib Achaibou and neuroscientist [Jane Plailly](#) to share their love and thoughts on olfactory storytelling and their sense of smell. Although placed directly after this introduction, these manifestos can be visited and revisited at any time throughout the use of this resource.

Between the sections we have inserted relevant case studies which showcase how various curators, scholars, scent designers, and olfactory consultants have used olfactory storytelling in their own practice. These case studies vary in topic and format but all of them offer personal and tangible experiences of the benefits and challenges of bringing scents into the museum. A brief overview of each case study follows.

Section 1 - Curating Olfactory Narratives

- Case Study #1 - *Reconstructing a Perfume from Historical Texts* focusses on scholar and researcher Ineke Huysman and the knowledge she acquired working on a project called [Memory of Scent](#). She spoke about the experience of recreating Constantijn Huygens' (1596-1687) *Ode de Parfum: To My Mother* from 1635.
- Case Study #2 - *Olfactory Storytelling Used for Visitor Access and Education Design* focusses on [Marie Clapot](#), a sensory museologist at the [Metropolitan Museum of Art](#), and showcases how the incorporation of multisensory engagement can create a more inclusive environment for those with disabilities.

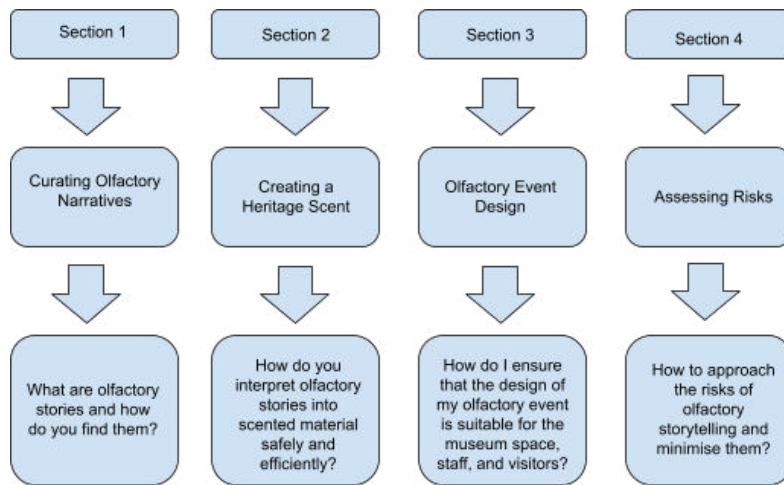
Section 2 - Creating a Heritage Scent

- Case Study #3 - *Presenting Communal Heritage via Heritage Scents* is an interview with sensory consultant [Tasha Marks \(AVM Curiosities\)](#) and freelance curator [Claire Dobbin](#) about their experience working on the [London: Port City](#) exhibition at the [Museum of London Docklands](#). The case study discusses the methods, results, challenges, and solutions of the use of smell in an exhibition that explores communal heritage.
- Case Study #4 - *In Search of Scents Lost: Early Research in Employing Olfactory Methods for GLAM initiatives* is an interview with curator and art historian [Caro Verbeek](#). The project Verbeek organised as part of her PhD, [In Search of Scents Lost - Reconstructing the volatile heritage of the avant-garde](#), served as inspiration for the Odeuropa Project. The goal of this case study is to better understand what adding an olfactory dimension to storytelling actually does for different target groups.

Section 3 - Olfactory Event Design

- Case Study #5 - *Inspiration for Presenting and Distributing Scents in Heritage Spaces*, Jorg Hempenius, scent expert and founder of [iScent](#) in the Netherlands, guides the reader through a wide array of smell distribution methods that can be utilised in different GLAM institutions.
- Case Study #6 - *Follow Your Nose! A Guided Tour with Smells at Museum Ulm, Germany* is an interview with curator and art historian [Lizzie Marx](#). [Follow Your Nose!](#) was an event organised by the Odeuropa project in collaboration with [Museum Ulm](#) and [IFF](#) and was itself part of the research that contributed to the creation of Odeuropa's *Olfactory Storytelling Toolkit*. As a

co-curator of the event, Marx explains the benefits of olfactory guided tours and offers interesting insights into the research behind certain heritage scents.



Caption: Diagram of an overview of the *Olfactory Storytelling Toolkit: a 'how-to' Guide for Working with Smells in Museums and Heritage Institutions*.

Where Do I Start?

This toolkit is meant to be read as an online resource as it has interactive components via clickable **hyperlinks**. Hyperlinks may lead to an Odeuropa developed worksheet for your own use and exploration, the website of an olfactory event, external resources and databases, and audiovisual content. The toolkit is also available to download in its entirety or by section for reading and marking up as you wish.

This resource does not need to be read *from back to front*, however, we suggest that if you are completely new to the subject, that you read the sections in the order that they are presented. Depending on your knowledge and interests, you can pick and choose what you would like to read first. For example, a curator wishing to find olfactory narratives in their collection and link those narratives to olfactory materials may want to read section 1 and section 2. A museum educator or tour guide for a heritage site may want to start with section 1 and especially chapters 3 and 4 which focus on employing nose-first methods to approach olfactory heritage objects and spaces.

Although this resource was developed with GLAM professionals in mind, it is beneficial for a variety of users: scent designers, teachers, community groups, scholars, historians, designers, and artists who wish to employ olfactory storytelling. Scent designers who wish to create atmospheric scents and/or scents that represent historical concepts may find section 2 helpful, whereas an artist who wishes to incorporate scents into their design may find section 3 more useful.

This resource should not be treated as the *be-all and end-all* of olfactory storytelling. We understand that this resource may answer a lot of questions but that it may also raise many along the way. It is important to consider that this toolkit is built on the experiences and insights of the trailblazing olfactory storytellers before us and that its contents should be considered as the basis for future conversations, development, and research. We welcome you to start reading and experimenting. We hope that the Olfactory Storytelling Toolkit inspires as well as informs and opens new conversations amongst your colleagues, friends, and family.

Have fun and keep smelling.

Overcome Odorophobia - Educate the nostrils. Historical Smell Manifestos, for the Present and Future

“One has to strengthen the idea, the word, the act not just with sensations of sounds, noises, colours, shapes, but also with the sensation of smell. Concrete and abstract.” - Ennio Valentinielli, 1915

The year 1909 is seen as the year that the artist's manifesto was invented by Filippo Tommaso Marinetti, founder of Italian Futurism. It ushered in an entirely new genre in art history. Marinetti saw the manifesto as a way to stimulate societal and cultural change, something formerly reserved for politicians. Marinetti's invention became a template for other artists and their movements.

Traditionally, manifestos are characterised by a point-by-point enumeration of everything a group favoured and opposed, as well as a description of practices followers must meet to be 'future proof.' Manifestos propagated new forms of education, proposed the reorganisation of 'old' institutions such as traditional museums, churches, art, universities, fashions, and eating habits.

The art of scent

The Futurists were the first group to publically embrace and legitimise the sense of smell via manifestos. In 1913, Carlo Carrà wrote about the possibility of painting sounds and smells in *La pittura dei suoni, rumori, odori* [*The Painting of Sounds, Noise, Smells*]. He argued that the tiniest whiff of scent can ignite creative processes. Two years later, in *L'arte degli odori – Manifesto futurista* [*The Art of Smells – Futuristic Manifesto*], Ennio Valentinielli presented smell as an autonomous tool for storytelling, poetry recitals, and artmaking. Valentinielli had a grand olfactory vision that included the use of smell - not only fragrances but also stench - in daily life and society. Valentinielli was interested in historical olfactory customs, which he took as inspiration for the future, to envision a more versatile application of scent. He came up with the idea to create scent narratives, which Valentinielli described as “uniodorità” or a neologism combining ‘unione’ [fusion] and ‘odore’ [scent]. He suggested that we should align scents with the function of buildings. He proposed two principles: firstly, we must “educare le narici!” [educate the nostrils!] and secondly, we must overcome our ‘odorophobia’ (our fear of (mal)odours).

The manifestos by Carrà and Valentinielli have served as historical inspiration for many artists, scholars, and perfumers in the past decade. The Odeuropa project has taken inspiration from these historical manifestos: to overcome odorophobia, educate the nostrils, ‘paint with smells’ and develop olfactory storytelling that aligns with museums, schools, and other (public) spaces.

For *Olfactory Storytelling Toolkit: a “how-to” Guide to Working with Smell in Museums and Heritage Institutions*, we invited four olfactory experts, an artist, a philosopher, a perfumer, and a neuroscientist to write their own smell manifesto. Their utopian tone makes these manifestos mirror their historical predecessors - rejecting a purely ocularcentric approach to art, museums and education, and promoting the use of scent as a fruitful medium for storytelling and safeguarding heritage. Just like Valentinielli, these visionaries or *olfactionaries* learn from the past, embrace smell, and exemplify how we can employ the full potential of this powerful but least understood sense: for the present and the future.



Caption: *Teto de Vidro / Glass Ceiling*, 2018, Museu de Arte Contemporânea, MAC/USP, São Paulo, Brazil. Photo credit João Caldas.

Josely Carvalho - Olfactory Artist (Brazil and the United States)

www.joselycarvalho.com

[Josely Carvalho](#) is a Brazilian multimedia artist with studios in Rio de Janeiro, Brazil, and New York City, USA. In the last five decades, her art has embraced several mediums, highlighting memory, identity, women issues, and social justice while also challenging the crossings between the artist, the public, art, and politics. Her current project [Diary of Smells](#), is an on-going, cross-disciplinary series of works where olfaction is a protagonist amongst other typically dominant components within contemporary art. Her latest individual exhibits are: [Within the Smells of History](#) at [Museu Histórico Nacional](#), Rio de Janeiro, 2022-2023; [Suspensio: an interruption of time](#) at [Olfactory Art Keller Gallery](#), New York City, 2021; [Diary of Smells: Diary of Smells: Affectio](#) at [Museu Nacional de Belas Artes](#), Rio de Janeiro, 2019; [Diary of Smells: Teto de Vidro](#) at [Museu de Arte Contemporânea](#), São Paulo, Brazil, 2018.

Title: *Diary of Smells: Olfaction as an Experiential Medium, 2010-2023*

A manifesto format of writing is, for me, too didactic to express the intimacy and elusiveness of the sense of smell. I prefer to present fragments of an open diary, with space for changes. On the right side, you find parts of this open diary - *Diary of Smells* while on the left side is a new added response to these entries. Names of relevant smells are highlighted in the centre.

Contemporary art has privileged the senses of vision and audition, and it has been my mission to include olfaction in this scenario. We live in a world of flux. Olfaction affects me by its fluidity, instability, and openness to multiple interpretations.

*Time and space. Memory and history. Body and embodiment. Political and social ———
momentum.*

These are the issues that weave making art for me. The female body is the first map.

I could say that olfaction is also an art of the in-between. It exists in the crevices. It intertwines present and past experiences. It is capable of anticipating the future. Its interactivity is physical and emotional.

Smell embraces us haptically. It invades us. We cannot escape. —

As Nietzsche put it, “My genius is in my nostrils.” To smell is a form of meditative engagement with the act of thinking. Smells contextualise and reinforce the content of my installations.

Because smells are sensed and interpreted differently, I do not seek to replicate an existing odour but rather to explore the possibilities of conceptual smells.

*My first olfactory memory caused me to create Smell of Fish, an installation/performance —
born from the connection between olfaction, prejudice placed on women’s desire, and a
retrieved grandma’s memory. There was no smell, only its memory. At the openings, I served
mini codfish cakes. (1983)*

Nest Wet Earth Open Ocean Hot Sun

The womb/nest is the place where the sense of smell meets the primal necessity for protection. Shelter is the first place where we learn to affect and to be affected by others.

We smell throughout our life. The body inhales the last smell at the same time as it exhales the last breath. Death is associated with odours that others experience; as our physical body shuts down, it begins the process of decomposing. Decomposition is often camouflaged by the smell of flowers.



Caption: Diary of Smells: Passages, 2011, SESC São Carlos, São Paulo, Brazil. Photo credit Sung Pyo Hong.

Burrow Suspension Incense II Emptiness

We are living in a moment of political, environmental, health, and social crisis. —

The pandemic interrupted the rhythms of daily life, placing us all in a state of suspension. It led me to find refuge in my garden. I watched wild birds come to eat from the bushes and fly in the open air. I sniffed the fermented scent of lantana flowers near my window. [...] Burrow is an animalic scent, made of dark notes that transport us inside the protective nest of the earth. Incense II calls to mind the freshness of forests and tree resin. Emptiness interprets the discomfort of feeling displaced in space and time. Suspension is the duality of being cocooned while facing danger and risk.

Where do the birds fly when death screeches at them? (2021)



Caption: *Suspensio, an interruption in time*, 2021. Olfactory Art Keller, New York City, USA. Photos credit Alex Trippe.

Absence Persistence Pleasure Emptiness Illusion Affection

Like poetry, smell provokes individual interpretations. It requires tranquillity to savour and distinguish the many layers of meaning hidden in its composition. Because of our limited vocabulary for olfaction, we rely on metaphors, stories, fantasies, and poetic associations to create and describe it. The visual imagery of a text can be transposed to smells.

*One after another the wine glasses broke, and I kept the pieces without questioning why. —
Very early one morning, I arranged some of the broken goblets on the old back marble
fireplace... right underneath my self-portrait, Upside Down. In that moment,
— I caught an odour of mother's sour breast milk from one of the glasses and I started this
olfactory book project. It was the beginning of a search for the stories recalled through a
faint smell emanating from the glass shards. Now I question why I save glass shards.*

*Could it be the need to have at hand a weapon to puncture or dig into the arteries?
Or would the slivers be a placid nest for memory? (2012)*



Caption: Estilhaços/Shards, 2012. artist's book, ed: 100. Six smells based on six texts as memories of the moment a wine glass breaks. Photo credit João Caldas.

Our relationship to smells tracks cultural values. The power of smell lies in the gift of connectivity, in its capacity for conveying thoughts and feelings from the unconscious to the conscious. Even though throughout modern times, smell has been presented as a tool and a marker of social division, social inferiority, and elite domination.

I extend the space of my installations through 'Smell Walks,' meditations in movement, to connect the private to the public. This form of olfactory awareness empowers our perception of social, cultural, and urban differences. As an ethnologist, I looked for olfactory signals to unravel forgotten memories amongst the inhabitants of Viana, a town in the state of Espírito Santo in Brazil. We jointly established an olfactory map of the different communities in the area during my three months' residence. A geography of

*smells. A rescue of a forgotten discipline.
(fragment from Diary of Viana, 2011-2012, at my residence, "What are the smells that
bring the memories of a town?")*

Invasion Delirium Mouth of Death Rainforest Cannonball Fear

As an abstraction, smell travels through time, entering the realm of history. Because of its invisibility, it explores the intangible. We sniff to smell.

I invisibly transform the mouths of 20 military cannons, symbols of European colonial power, thinking of them as time tunnels. I wonder what secrets have been forgotten beneath the smooth darkness of these obsolete lingams, symbols of military, economic, and sexual power. I search inside their rusty iron walls, where I find persistent reverberations today of pervasive violence, racism, unequal economic power, fundamentalist doctrines, the dismantling and extermination of cultures, and the many incentives to resort to weapons, all of these characteristics still present in Brazilian culture. (Within the Smells of History, 2020-2022, Museu Nacional Histórico, Rio de Janeiro)



Caption: *Within the Smells of History*, 2022. Museu Histórico Nacional, Rio de Janeiro, Brazil. Photo credit Pat Kilgore.

Design notes:

Photos width (except the last one one): 8cm – proportion 3:2

Last photo (max width): 16cm – proportion 4:2



Dr Annick Le Guérer, academic, anthropologist and philosopher

[Dr Annick Le Guérer](#) is an anthropologist and philosopher as well as a specialist of the sense of smell, odours, and perfume. She is also an associate member of the [University of Burgundy](#), France, and a member of the [Scientific Committee of the Osmothèque](#), France. Through her books and exhibitions, she has sought to restore the sense of smell and perfume to their rightful place.

Title: Honouring the Multifaceted Sense of Smell

Through my books and exhibitions, I have tried to honour the position of smell and perfume: by analysing the reasons for the discrediting of olfaction for centuries by a vast majority of philosophers, psychoanalysts, and scientists; by showing the complexity of perfume and its high cultural status, and by removing it from its supposed sole seductive function. Today perfume has become part of artistic activities and, after a long eclipse, in medical care. As for the sense of smell, it is now completely rehabilitated and we are increasingly attentive to olfactory heritage as long as we open the doors to history.



Photo credit to Miguel Ángel Manrique

Nadjib Achaibou, perfumer.

Nadjib Achaibou is a perfumer based in Mexico creating consumer products in Latin America. He is passionate about using fragrance as a storytelling tool in concerts, theatre, and multisensory virtual reality. He is a strong advocate of using scent in artistic contexts, with science, creativity, and safety, to enhance the experience of audiences and creators thanks to the beautiful power of well-created perfumes.

Title: Using Scent to Enhance the Artistic Experience

If you don't curate the scents in your exhibition, the audience will curate them for you.

Imagine if people were allowed to stand in a museum with loud speakers, playing their favourite radio station on max volume. The individual may enjoy it, but collectively, it would be chaos. All the details that were carefully designed by the artists and the curators would be drowning in the noise.

Scent has the power to make people focus on the present, while enhancing the imagination of the person smelling it. In the age of extreme visual stimulation, it is a powerful tool to make people stay in the present. If done correctly of course.

Scent is a difficult medium to work with outside of the traditional uses. For soaps, perfumes or cleaning products teams of perfumers, evaluators, and chemists compete in international briefs to create the best perfumes most suited to the customer's needs within each context.

Here, scent is at the centre of the creation.

I can understand why curators forget or do not want to work with perfumes and scent designers. There is a difficulty for big laboratories to supply the small amounts needed for cultural exhibitions and events. There are the spectacular anecdotes of art spaces smelling of some imaginary animal's poop for weeks or months due to an unexpected spill of a smell creation. And of course, the urban legend that perfume is a *corrosive gas* waiting to devour the audience's lungs and a million dollar painting.

But I am here to argue that the perfume industry has changed and in my personal opinion for the better!

Being a chemical industry, it is of course highly regulated and thankfully each material we use is analysed to reduce risk. Ingredients that were once dangerous have been banned from the perfumers' palette and today we know how to make scents that are safe. Regulation is often seen as restricting creativity, but I believe that it gives all of us the framework to create perfumes that are safe and ready to use in new spaces.

I have had the privilege to create perfumes for concerts, the Venice Biennale, virtual reality experiences, and large scale immersive theatre events. The result has always been positive. I have seen tears as a result of intense emotions triggered by the correct scent paired with the right moment. I have seen people holding a scented blotter dearly during a whole concert. Very personal memories were shared with me, and for many, scent opens up opportunities to talk about them. *What I love the most is that you need to be there to experience scent and if done properly, it can be the missing link of the story you are trying to tell.*

[Munduruku: The Fight to Defend the Heart of the Amazon](#), a multisensory virtual reality experience co-created by the [Feelies](#) and [Greenpeace](#) was created to shed light on the indigenous Munduruku People and their home. Grace Boyle (founder of the Feelies) and myself went to the Amazon rainforest with the filming crew to experience and record all the non visual cues. This process was necessary for the 'multisensory script' created to develop the final project. While Grace was orchestrating all the senses together, recording vibrations from the winds at different moments of the day, humidity, heat, textures, and sounds, my job was to smell everything and record my impressions as best I could. I was surrounded by all of these novel and incredible smells that the Munduruku People were keen to show us. For the project, I recreated the scents I experienced and the Feelies created technologies and experiences to include these scents at the correct moments during the movie. The depth of the humid jungle could be

smelled while the audience entered the Munduruku village. A disturbing scent of petrol and fire polluted this jungle as they observed its destruction by deforestation. Finally, a warm and human aroma calmed them as the leader of the Munduruku village invited them to take action to save the Amazon.

Well curated and orchestrated perfumes allow technology to become human. The scent from the film helped Brazilians from big cities to imagine what it is like to care and live in the Amazon like the Munduruku do. Perfume allowed for a powerful message to be ingrained in someone's memory. Yet, to create those perfumes, I needed to be there. I created a jungle scent before my trip to the Amazon. It contained the molecules that represent nature, green, marine, which I learned in perfumery school. Yet, the intense scent of humid leaves and rich soil from a primary jungle was the complete opposite of the clean fresh scent I had imagined. Being there transformed my vision of what a natural scent is like and has transformed my work when recreating natural scents.

For the Venice Biennale in 2022, I worked with the Sámi artist [Máret Anne Sara](#) to transcribe the scent of hope and fear of the Sámi people who have lived for generations in the most northern part of Europe. For the Mexican French Algerian perfumer that I am, I could not imagine a more distant culture. But with Máret Anne's trust and guidance, we managed to create the universal feelings of fear and hope to accompany [her pieces for the Nordic Pavilion](#). We gave texture to the air and sound to silence. Her words transformed into smells and culminated with thousands of individuals exploring her artworks with our sensory interpretation of hope and fear. (See below for some of the visitor impressions collected by Laura Lucchini.)

For Máret Anne's artworks, I had to interpret an emotion and make a scent that would be understood by anyone. My personal technique is to do very long, personal, and profound interviews with the artist and translate their thoughts or memories into scents. In the case of Máret Anne Sara, fear was the abstract and pungent scent that reindeers excrete when they are scared. We analysed faecal material of two reindeer populations, one that was relaxed and grazing in the nordic tundra, and one that was found in a truck of the Norwegian authorities preceding execution. We found an array of sulfuric notes that showed me the way to create the smell of fear. In the exhibition, an Italian worker passed by and shared with us that it smelled like the horse's sweat before the races, which he used to compete in as a kid. This is when we knew that the scent was correct.

Hope was harder to create. As in life, fear is always easier to find than hope. We explored many avenues. The abstract scent of my newborn son, that of Máret Anne Sara's, and the scent of the nordic tundra and springtime wind. In the end, we took inspiration from a tiny flower that grows in May in the north of Norway for a few days. The smell of this flower represents the end of winter for the Sámi people.

Some spaces beg to be curated with scent. I just want to finish with an example of an installation where I told myself I would love to make them a perfume!

The installation was a room filled with colourful fake hair on the walls, like a funny rainbow cave that could have been brilliant! If it wasn't because of the suffocating scent of cheap plastic and glue that

choked you with each breath. What could have been a delightful moment in a surreal place, became a bad joke from the worst costume shop in town.

Not having a scent should be a conscious choice.

Everyone I talk to has at least one powerful memory linked to a perfume or a scent. Audiences love a good perfume. Always. And scent is always present, whether it is the latest trendy perfume worn by the person next to you or some bodily aroma you wished that same neighbour had hidden with perfume. Scent is always present.

Curate it before it curates itself.



Jane Plailly - Cognitive neuroscientist (CRNL, Lyon, France)

[Jane Plailly](#) holds a Ph.D. in Cognitive Science and is a CNRS researcher in the team "[Olfaction from Coding to Memory](#)" at the [Lyon Neuroscience Research Centre](#) (CRNL, Lyon, France). She has been working for more than 20 years on the links between olfaction, emotions, and memory and studies this relationship not only by questioning human behaviours but also by exploring the physiological and neural bases of these behaviours. She is particularly interested in the specificities of the sense of smell compared to other senses.

The Persuasive Power of Smell

One winter morning, we step out onto our doorstep and a smell catches us, accompanied by a complex emotion. This smell is only a thin trace - almost imperceptible. We then close our eyes, take a deep breath and the smell is here, sweet and soft. As for the emotion, it feels like an awakening and an excitement. Although it seems improbable, since no other evidence than this delicate olfactory thread confirms it, spring is about to spring! It smells like spring! Smell has the power to make us experience realities that do not yet exist for our other senses and this power awakens me...

This is not the only talent attributable to the sense of smell. Smells also have the power to make us relive past realities with force, as they can be vivid reminders of autobiographical memories. This is known as the so-called '[Proust's phenomenon](#),' named after Marcel Proust whose writings brilliantly illustrate how a smell alone can be the cause of a sudden relapse into a memory of our past. Researchers in psychology and cognitive neuroscience have studied this phenomenon by comparing memories evoked by smells to memories evoked by other cues such as images, sounds, music, words, or tactile perceptions. Although still subject to debate, research findings suggest that memories evoked by smells are more emotional, accompanied by a stronger feeling of time travel and are recalled less often, making them striking, and deeper. Memories evoked by odours are primarily associated with early childhood, whereas memories associated with other sensory cues are predominantly associated with adolescence and young adulthood. It is important to note, however, that although smells have the power to raise memories with very specific characteristics, they generally generate fewer memories than other cues.

Whether it is a past or an upcoming event, smells make an event tangible. Why does smell have this persuasive power? One hypothesis is its connection to emotions. The perception of an odour generates a *de facto* emotional response of rejection or attraction - probably to promote the survival of our species by influencing mate choice or by allowing us to avoid predators and poisoning. This emotional response takes place even before the identification of an odour, which is often uncertain.

Although the research by neuroscientists working on the reasons behind the power of odours is still in its early stages, it allows advancing the following hypotheses. A first hypothesis is the anatomical proximity between the brain regions dedicated to olfaction, emotion and memory. The amygdala is crucial for emotional processes and the entorhinal cortex is a gateway for the hippocampus, a key region in memory processes. Both parts are the ensemble of the so-called "primary olfactory" regions or the first brain regions integrating the information conveyed by the capture of the odorant molecules by their receptors in the nose. Moreover, not only the olfactory and the memory brain regions are extremely close anatomically, but they are also strongly interconnected and emerged simultaneously during evolution. Another hypothesis is the absence of thalamic relays. The thalamus is a brain region that allows the filtering of sensory information before it is integrated by the primary sensory regions. While visual, auditory, gustatory and tactile information is previously sorted and pre-processed by the thalamus, olfactory information is processed as is, in its raw state.

Finally, among all the particularities of the sense of smell, what appeals to me the most is the extreme diversity by which each person can experience the same olfactory reality. Gene coding for olfactory receptors are extremely variable between individuals, contributing to a unique ensemble of receptors capturing chemical odours that provides us each with a personalised perception of our olfactory environment. If I dare to use a colour analogy, I would say that when I smell royal blue, you may smell soft green. This subjective nature together with the unique connection between smell, emotion and memory, adds a sense of intimacy to olfactory perception.

The sense of smell is unique compared to the other senses. Research is gradually disclosing the specificities of this sense and revealing it as a privileged entry to what makes us unique and singular, emphasising our own experience, our intimacy, and our individuality. However, olfaction remains a sense that conceals many mysteries. The work of neuroscientists is crucial for a better understanding of it and to guide us towards an optimal use of the sense of smell in our daily lives.

Section 1. Curating Olfactory Narratives: Linking Scents with Collections

Introduction:

What *are* olfactory stories and how do you find them? What olfactory clues already lie hidden in the collection and how can they be traced? In an ocular-centric culture these ideas can be quite challenging to grasp. We hope that the opening thoughts of this toolkit inspired you to start using olfactory storytelling in your own heritage institute. However, getting started may seem challenging and you do not know where to start. Finding and choosing the olfactory stories that you want to tell is a good place to start.

This section will provide exploratory techniques and methods that will help you approach your heritage collection from a *nose-first* perspective. The first chapter will introduce you to the concept of *olfactory stories* and help you detect them in various types of collections. The second section will provide helpful information for finding smell related content in (digital) collections. Here we will also introduce digital databases that can assist this project. The third and fourth chapter will put our noses first by informing on how to explore material smells and smellscape through depot sniffing sessions and smellwalks.

Chapter 1	Chapter 2	Chapter 3	Chapter 4
How to make connections between your collection and olfactory narratives?	How to find olfactory information in digital collections?	How can using a <i>sniffer in residence</i> assist achieving a nose-first perspective?	How can smellwalks capture the olfactory landscape in and around heritage sites and institutions?
This chapter explains what olfactory stories are and how you link your collections with them.	This chapter provides an instruction on how to find olfactory stories into digital collections.	This chapter challenges you to open your collection to an expert nose to explore your collections nose-first.	This chapter turns your heritage institution or site into an olfactory landscape to be explored. It provides detailed information on how to conduct a <i>smellwalk</i> from beginning to end.

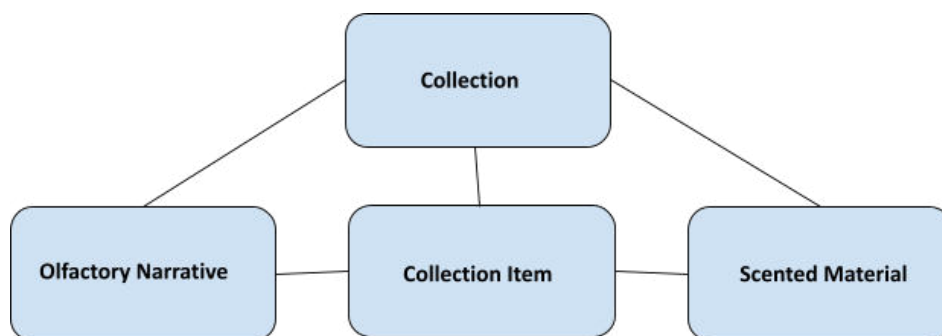
Chapter 1: How to make connections between your collection and olfactory narratives?

Introduction

The type of stories you tell about, through, or with smell will depend on the type of materials you have in your collection. Books, objects, artworks, and historical spaces all offer different opportunities. Every olfactory story has a set of characters: materials, places, and noses. These are the best places to start when thinking about olfactory stories. They will provide the search terms that you can use to trace smell-relevant material in your digital collections, which we will expand on in chapter 2.

To help you find narratives within your own collection, see [Worksheet Storyboarding. Smell Cards to Design Olfactory Narratives \(OST Resource 1\)](#).

Collections



How you find relevant olfactory stories within your collections will depend on the type of collection and the context in which you want to use those stories. In this sense, the contents of the collection greatly impacts the olfactory narratives available and as a result, the artefacts chosen and the scent material presented for visitor engagement. Below we outline different scenarios and how these scenarios can lead to olfactory storytelling. None of the below scenarios are exclusive and some materials may suit particular olfactory stories better.

1. Libraries and archives

Libraries and archives consist mainly of printed works or manuscripts. Collection managers can assist in finding items with a particularly pungent scent (ex. tobacco-stained books, books with pressed herbs, or unusual smelling paper and bindings) that can be used for olfactory storytelling. The texts themselves also offer interesting olfactory narratives. Household recipe books or novels offer the opportunity to reconstruct the smells of particular recipes or those inspired by smells the characters encounter or the

smells of the spaces in which those novels might have been read. The conditions in which the book has been used or stored may have imbued it with a particular scent.

2. Galleries: The Dutch artist Rembrandt warned his seventeenth-century patrons not to stand too close to his paintings, lest they be offended by the smells of the materials he used. The smellscape of galleries tend to be shaped by their transformative and experimental function. With the experimental tone in mind, these spaces can focus on smells associated with creating those artworks: paints, varnishes, inks, and other materials. Making art is a smelly practice and introducing visitors to this process can both engage and inform about historic artistic processes and how smell played a role.

3. Art Museums: Art Museums contain a variety of objects, such as paintings, prints, artefacts and sculptures which can offer rich material for olfactory storytelling. Since art museums vary in size and resources, searching for olfactory stories entails a bit more thought. We offer two approaches. Firstly, you could focus on the materials used or on those that certain objects once contained. Scent related objects could be perfume bottles, pot pourri bowls, pomanders and censers, or perfumed items such as gloves and powdered wigs. These need not be actual objects but can also be depicted in paintings. This leads to another approach which is to offer visitors an opportunity to 'smell what you see.' Here, scents are presented to match aspects of the collection item. This approach includes particular visual narratives which are shaped by their olfactory significance or olfactory iconographies. Olfactory significance may include a seventeenth century grocer's shop packed full of spices whereas olfactory iconographies include narratives like Adoration of the Magi and the Anointing of Christ by Mary of Magdalene.

4. Historic environments: Historical environments and heritage sites also offer interesting opportunities for olfactory storytelling. Visitor engagement can centre around built heritage or a historical space, such as a church or industrial heritage site. You could try to find out which materials were used and which activities took place in these spaces and which smells were likely to accompany the process. Events that are particularly smelly could include war, weather conditions, manufacture of products, the use of certain technology (steam engines, fire), flora and fauna, and rites and rituals. These types of environments can also highlight objects which relate to the olfactory events and the practices which happened there. Due to the rich location-specific content found at heritage sites, it could be interesting to present your visitors with scent timelines that map out the different scents and the related narratives and practices surrounding that specific place. This offers opportunities for visitors to compare and contrast the smellscape throughout time reflecting on topics of, for example, class, religion and sustainability.

Curatorial Spotlight:



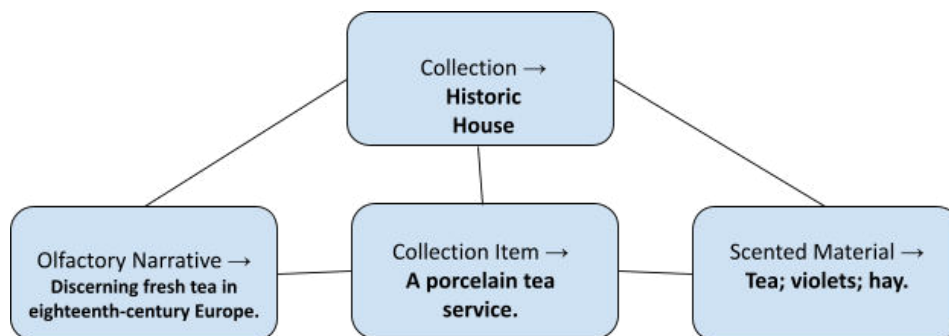
Caption: The Philip Johnson Glass House; National Trust for Historic Preservation.

In 2008 preservation architect and educator Jorge Otero Pailos, collaborated with Rosendo Mateu (Puig Perfumery Centre) and the Carolina Herrera fragrances team to create an olfactory reconstruction of Philip Johnson's Glass House in Connecticut, United States between 1949 and 1969. The reconstruction, containing cigarette smoke, leather and cologne, was meant to make visitors reflect on the meaning of how the tobacco stain on the ceiling of the historic building is an important indicator of the passing of time and to highlight conservational moves like the process of cleaning the house of these kinds of meaningful stains.

Characters

When building your olfactory story, you can choose to highlight different *characters*. Keep in mind that your *characters* are not just represented through types of *noses* but also olfactory iconographies, smell sources, places or smellscapes, and feelings.

Noses:



Who are the noses in your olfactory story? What socioeconomic background were they from? Which gender? Which profession did they practise? Which cultural background did they have? Was their scent ever described? In eighteenth-century Europe when commodities such as tea and coffee were new,

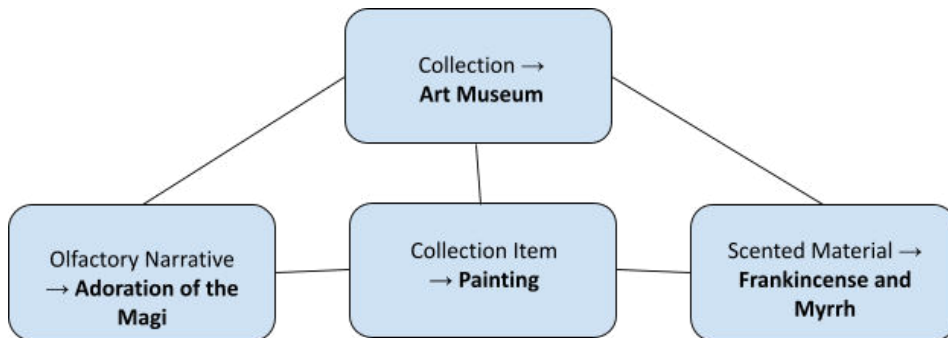
merchants, grocers, and consumers all had to develop the ability to smell out good quality tea: which was said to have the scent of fresh hay or violets. The deaf and visually impaired author Helen Keller indicated that she could smell all of these things. Another good example could be Napoleon who used eau de cologne in enormous quantities. This scent was only available for those of the higher echelons of society (unlike now). Famous actors such as Judy Garland were known for their use of perfume. Doctors practised their sense of smell to both recognise illnesses and to treat them with fragrant materials. Or what about the nose of a mother changing the diaper of her baby in numerous personifications and allegories of smell, while the father or male bystanders usually pinch their nose?



Caption: [Girl Smelling a Lily](#), Charles de Ligne, after Guercino, 1774 - 1792; etching, h 162mm × w 176mm.

Caption: [Smell](#), Hendrick van Beaumont, after Abraham de Blois, 1696, red chalk

Olfactory Iconographies:



Within your collections, you can choose to highlight particular olfactory iconographies also known as (often visual) narratives that are particularly shaped by their olfactory significance. Olfactory iconographies are extremely beneficial for highlighting parts of your collection that are missed because they are hidden in the background. Detecting olfactory iconographies can greatly enhance the museum experience as they can offer “a new way of seeing” the collection and can keep visitors looking at the artworks with little to no intervention of scented materials. However, bringing olfactory iconographies forward through the engagement with scented material is beneficial for getting visitors to learn about these narratives in a new and memorable way.

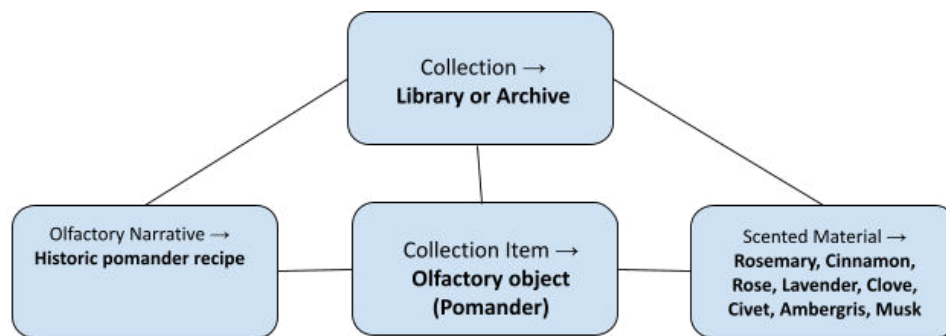


Caption: [The Adoration of the Magi](#), Jan Jansz Mostaert, c. 1520 - c. 1525, oil on panel, h 51cm x w ca.36,5cm. Free of Rights. Credit to the Rijksmuseum, Amsterdam.

Smell Sources:



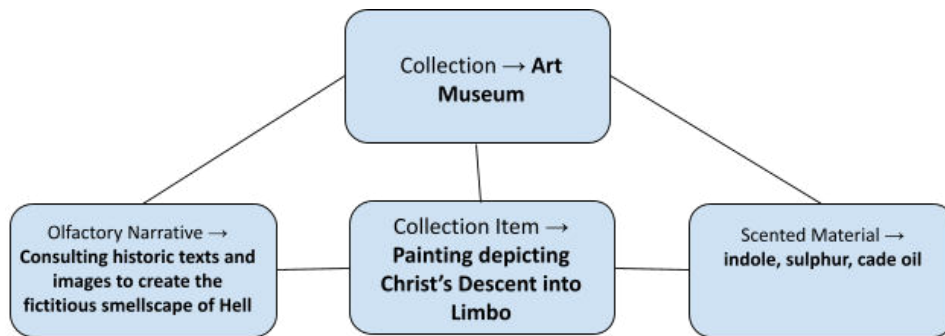
Caption: Images of the 'Sensational Books': a multisensory exhibition in Oxford University's Bodleian Library (2022). The image on the left shows a wall display with scents with which visitors could interact. The *Daily Telegraph* stated of the exhibition: "For the first time, researchers have been able to extract the smell from books in the collection of Oxford University's Bodleian Library and bottle it." Photo credit George Alexopoulos.



Smell sources are either depicted in paintings or found in collections. Smell sources can be a painted detail (outhouse on a seventeenth century Amsterdam canal or a pomander held in the hand) or they can be a physical collection item like a snuff box or apothecary cabinet. You can ask yourself, did your objects have a particular smell in the past and do they have a particular smell now? How were these

objects made and did the process of making them emit particular odours? Did the use of the objects involve the production of smells? What smells might have surrounded this particular object? The life story of an object from making, through use, to its new home in a museum collection, is also an olfactory biography.

Places:

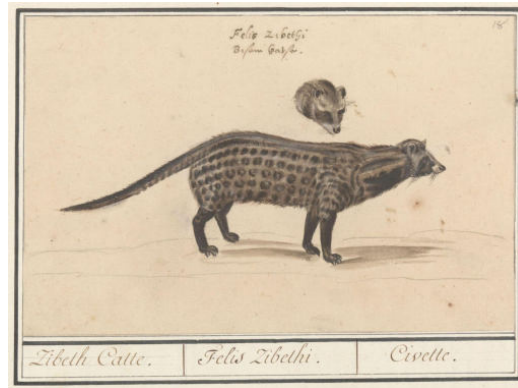




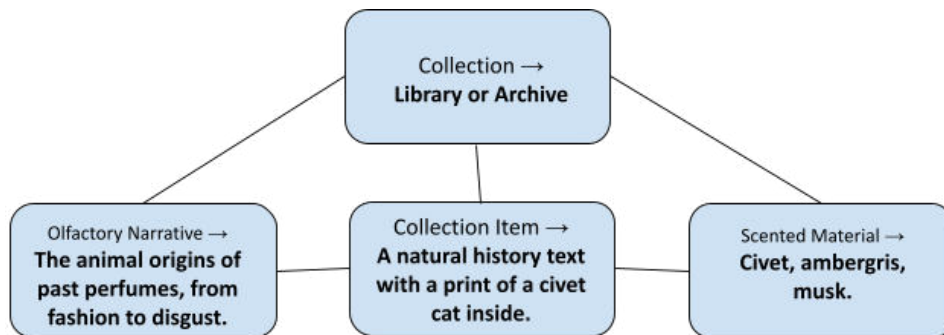
Caption: [Descent into Limbo](#), Philippe van Mallery, 1608 - ca. 1639, engraving and etching, h 89mm × b 54mm. Free of Rights. Credit to the Rijksmuseum, Amsterdam.

Exploring the smell of a historic or fictitious place can also offer a way of crafting an olfactory story. Where does your olfactory storyline occur? Do the smells change from space to space? Do the smells present change throughout time and how does the materiality the place impact that change? Examples could be a sixteenth century church (mould; bodies alive and dead; incense; rushes and herbs); a seventeenth century coffee house (coffee; tea; fresh newsprint; tobacco; fires) or a nineteenth-century ship (sailors; tar and oak; traded commodities). Olfactory stories may be inspired or informed by historic texts and images of the place. Or “expert noses” can visit historical smellscapes and record their olfactory impressions.

Feelings:



Caption: [Civet cat \(Viverra\)](#), Anselm Boëtius de Boodt, 1596 - 1610, brush in watercolours and opaque paint, raised with opaque white, handwriting in pen in brown, single lines in pencil, h 155mm × w 240m. Free of Rights. Credit to the Rijksmuseum, Amsterdam.



The emotions that people felt in response to odours are also central to any story. Past responses have varied hugely. The smell of tobacco smoke has been associated with ritual and statecraft in indigenous communities. In the west it has moved from exotic, fashionable, scent to a disgusting menace to public health and now, in an era of public smoking bans, a nostalgic scent associated with past smellscape of theatres, music venues, and pubs. How did people feel about particular odours in the past and how do these differ to our own feelings - both curators and potential audiences - today? A lot of the richness of olfactory stories comes from being able to explore the similarities and differences between responses to odours today and in the past. For example civet, a fashionable perfume in the seventeenth century, now often elicits reactions of disgust for its faecal odour. For mediaeval Catholics incense communicated the sacred state of being filled with grace, whilst burning frankincense today can often evoke the smell of shops selling dream catchers, crystals, and tarot cards!

Chapter 2: How to find olfactory information in digital collections?

Exploratory Tools

A number of resources, including the [Odeuropa Smell Explorer](#), the Odeuropa Encyclopaedia, and [Iconclass](#) can be used to supplement your own resources. Inspiration can also be drawn from the research already produced by smell scholars which can be accessed via the [Past Scent Bibliography](#). Smell is a sense that often operates by linking things together. Examining your collections through your nose rather than your eyes can reveal unexpected connections and exploring the links that jump across genre, time or space is what makes smell such a fascinating tool for storytelling.

How do you find these characters in your collections and begin to make the links in the chain of your olfactory story? Here we make some suggestions about how to search your own collections and how to contextualise them with further resources. There are different tricks and tools that can help you find olfactory narratives within your collections. Below we will offer more details about different methods and tools you can put into practice.

Keyword Searching:

Sometimes finding olfactory stories can be as simple as keyword searching within your own digital collections and catalogues. Successful searching is about knowing which objects or materials you need to search for which can be difficult because many are not familiar with olfactory vocabularies. As part of the Odeuropa project, we put together a list of helpful olfactory related keywords in six different languages: Dutch, English, French, Latin, Italian, Slovenian. Since olfactory vocabularies are rarely categorised, it is best to search for these terms in the 'free search' field.

See below for a few examples of unique olfactory keywords to get you started. [For a more extensive list, see Resource Olfactory Keywords \(OST Resource 2\):](#)

	Noun	Adjective	Verb	Objects
1	odour, odor, odours, odors	stinking	deodorized	snuff
2	stench	reeking	fumigate	tobacco
3	reek	whiffy	censing	incense
4	pong	fetid	snuffing	bottle or flask
5	nosegay	pungent	outsmell	gloves

6	posy	balsamic	bestench	pomander
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[Odeuropa Smell Explorer:](#)

The Odeuropa Smell Explorer is also a great source of historical olfactory information. This tool allows you to explore a wide range of smell-related items in historical images and references to smelling in historical texts published in English, Dutch, German, French, Italian, Slovenian and Latin. You can search the database by keyword and other parameters or you can browse specific smell sources, odour carriers and fragrant spaces that are relevant to your collections. For each of these you can view useful data such as word clouds displaying the most common terms used to describe smells or timelines looking at the number of references to smells across the period from the 1600s to the 1920s.

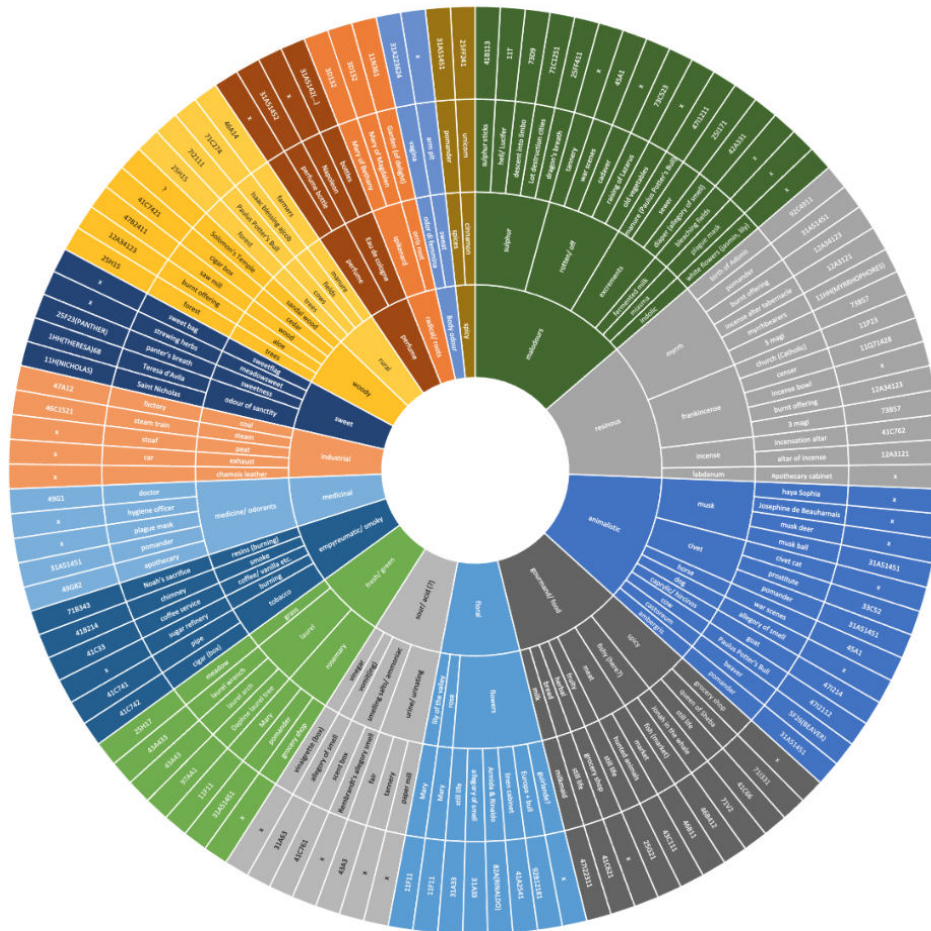
Odeuropa Smell Encyclopedia:

The Odeuropa Encyclopedia of Smell History and Heritage offers two resources. On the one hand, it contains entries by experts on the histories of smells, noses, smellscapes, and olfactory objects. Each of these entries is split into smells; places; practices; feelings; and noses. The entries include other useful material such as historical images, chemical information, a bibliography of further reading. On the other hand, the Encyclopedia also offers storylines that can be explored in order to inspire your own olfactory storytelling. These are built using the open-source digital storytelling tool 'Twine'. Both entries and storylines can be searched by users.

[Iconclass:](#)

Iconclass is a multilingual (English, German, French, Italian, Finnish) iconographic classification system used by museums and other heritage institutions for the description and disclosure of images of works of art, book illustrations, reproductions and photographs. Iconclass is one of the largest content classification systems within visual arts. Initially designed for historical imagery, it is now also used to create subject access to texts and to classify a wide range of images. Like the Dewey Decimal Classification system, Iconclass works with ten main divisions, which give entry to hierarchically ordered subdivisions.

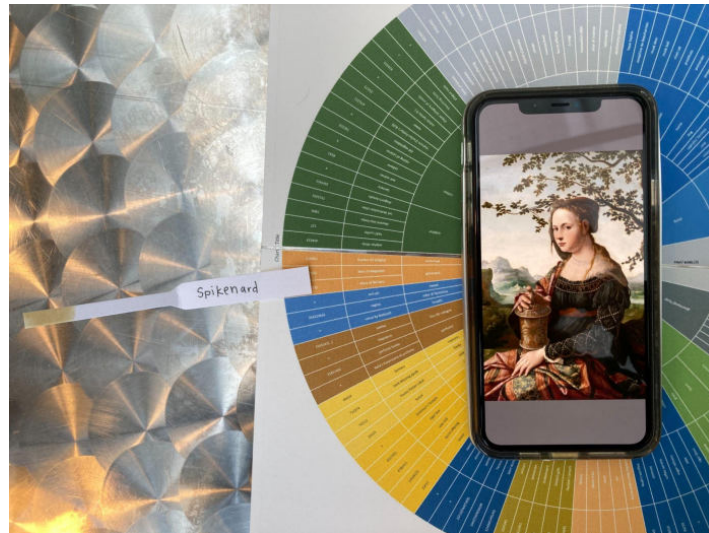
Odour Wheels:



Caption: The Odeuropa “Nose-First Art Historical Odour Wheel” starting from scent families in the first ring, connected to odorants in the second ring, and then to artworks and artefacts around that, ending with an outer ring with Iconclass codes. Please note that the colours of the wheel are arbitrary.

The Odeuropa project thought of experimental methods to approach digital and physical collections via odour wheels. There are various approaches to build an odour wheel which can be seen amongst different industries: perfumery, wine, cheese, and even books. The Odeuropa “Nose-First Art Historical Odour Wheel” provides an easy and accessible way to connect art historical narratives directly with scent families and materials. This odour wheel can be printed out and used to find olfactory narratives within your own (digital) collections and if desired, public engagement. You can read more about how Sofia

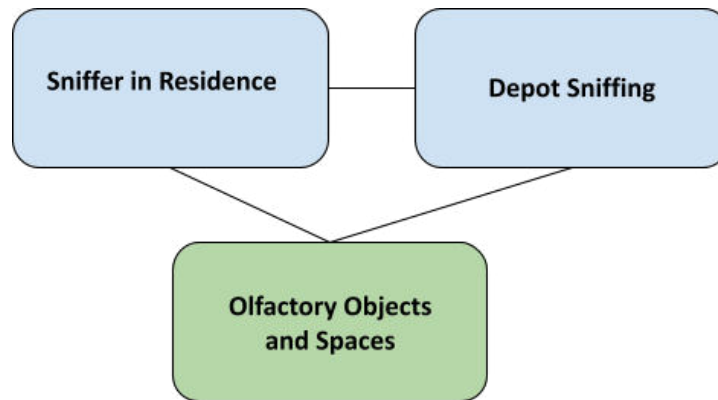
Collette Ehrich and Odeuropa research intern, Jenna The used the wheel to connect scents and art works [here](#).



Caption: Connecting scents to Odeuropa’s “Nose-First Art Historical Odour Wheel” at Mediamatic’s Aroma Lab Maria Magdalena, Jan van Scorel, ca. 1530 from the Rijksmuseum collection with Spikenard. Picture credit Sofia Collette Ehrich.

You can print this odour wheel for your own use. See **Printable Odeuropa Nose-First Art Historical Odour Wheel (OST Resource 3)**.

Chapter 3: How can using a *sniffer in residence* assist achieving a nose-first perspective?



Having a *sniffer in residence* join your institution is a helpful way to find olfactory narratives and objects in your collection. You can invite them into your depot for a *depot sniffing session* or your digital archives to help you identify olfactory related themes in your collection. You can also invite them to lead focus groups or tours for your institution's team and visitors and shape public programming or events.

What and who is a *sniffer in residence*?

Many heritage institutes and sites hold smell related objects and olfactory spaces which are often not known about, accessible and perhaps not valued. However, future olfactory events could be inspired and greatly benefit from identifying and including such artefacts and narratives in public engagement. A sniffer in residence can help identify olfactory objects and spaces as well as provide tips for how they can be presented to the public in a way that adds value and raises awareness around olfactory spaces and objects.

Sniffers in residence can include expert sniffers. For example, scent designers, academic or commercial experts (ex. in odour pollution and air quality), coffee-graders, sommeliers, or chefs. Sniffers in residence may draw from local communities who are invested in the heritage site or collection. For example, for the [London: Port City](#) (2021-2022) exhibition at the Museum of London Docklands, the olfactory artist and consultant Tasha Marks ran a series of sniffing sessions and interviews with local people who had worked at the docks. In museums that contain objects from indigenous peoples or religious communities, you might seek to involve members of the communities for which they hold value in identifying and describing their smells.

What is a *depot sniffing session*?

If your institute has a depot, you could engage in a *depot sniffing session* either with your staff or via an expert *sniffer in residence*. As archivists and curators are more prone to clean historical objects and dispose of their scent for conservation reasons, many historical objects and spaces lack their smell. Still, certain objects might still give off a scent or hold a specific olfactory character such as books, perfume bottles, or apothecary cabinets. Due to their hands-on approach, conservators may be able to indicate

interesting objects or spaces. Scent experts can imagine (or *olfactorise*) which scents might be connected to objects, spaces and even climatological circumstances.

Before going into the depot you can also search your own collection management database using olfactory keywords which we provide as a resource. Since similar items are often placed near each other in the depot, approaching one olfactory artefact can lead you to another - sometimes you can even just follow your nose.

Example of a sniffer in action:



Caption: Judith van Gent sniffing an old bottle of Boldoot perfume, shaped like an orphan girl in the depot of the Amsterdam Museum.

During a depot sniffing session at the depot of the Amsterdam Museum, Judith van Gent (head of collections) and Caro Verbeek first printed out a list of possibly odorant objects, and started to search for them. They were suddenly surprised by a very strong smell in the depot. When they followed their nose, it turned out that the scent originated from boxes that contained the contents of a 'simplicia cabinet' also known as an apothecary cabinet.

What are the benefits of using a *sniffer in residence*?



Caption: An IFF perfumer sniffing the contents of a 17th-century miniature apothecary cabinet to determine the organic compounds at the Rijksmuseum, Amsterdam, the Netherlands. Photo courtesy of Caro Verbeek.

After identifying olfactory related artefacts in your collection, olfactory events can highlight the function and the historical context —the noses, spaces, practices related to them— of these objects through individual sensory impressions of their (lost) contents. Although the scented substances contained in objects are often disposed of for conservation reasons, these items can still contain perceivable scented residues. These are able to be examined by (trained) noses like scent designers or by heritage scientists using chemical analysis such as gas chromatography mass spectrometry. Sometimes the objects still emanate a distinctive scent. If unidentifiable, a sniffer in residence can source text and image material to better understand the sensory history of that object.

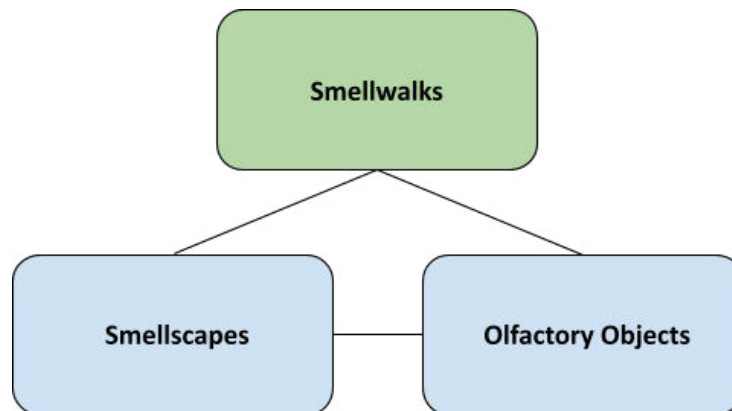
What are potential topics for *depot sniffing sessions*?



Caption: The Odeuropa team sniffing books and manuscripts in the [National and University Library Slovenia](#) and the Franciscan Monastery Library Novo Mesto. Photo credit to Inger Leemans and Sofia Collette Ehrich.

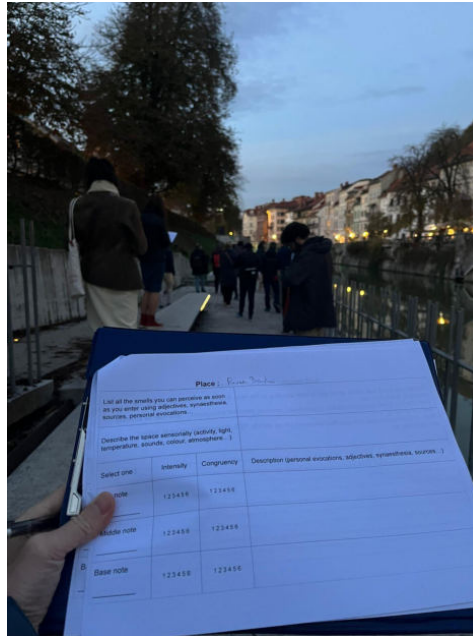
There are a variety of artefacts that can be discovered via depot sniffing sessions. Some examples include books, manuscripts, and typical perfume or fragrant medicine jars. Leather products such as gloves, snuff boxes, wigs, dresses, pomanders, cabinet drawers, pipes, machines, cars or botanical materials are the most likely candidates. Facilitating a depot sniffing session requires careful planning and care. They should be carried out with supervision and/or only approached after certain instructions or training.

Chapter 4: How can smellwalks capture the olfactory landscape in and around heritage institutes and sites?



What is the olfactory landscape of your heritage institute or site? Throughout time, Western museums have embraced the idea of the 'white cube' or that a gallery should be a quiet space where visitors are not distracted from the visual art. This idea supports limited engagement within the space and considers multisensory methods as disturbances rather than opportunities. However, exploring certain spaces of heritage institutes can encourage a nose-first perspective with little intrusion to the institute's environment and the people and collection items within.

Many heritage institutes and sites hold unique smellscapes: rare book rooms, archeological sites, old castles and houses, and natural history museum cabinets. These spaces can be used as an asset for public engagement when opened up for smellwalks. Smellwalking not only enables you to map the smellscape of your institute, but also invites collaboration by engaging both staff and visitors in the process. With minimal equipment but careful preparation, a smellwalk can be a fun and easy way to invite visitors to approach your collection through a nose-first perspective while also offering them a unique experience. Smellwalk experts Victoria-Anne Michel and Kate McLean contributed their knowledge to this chapter so you too can start smellwalking in your own heritage institute!



Caption: Smellwalk form used by a participant on a smellwalk carried out by Victoria-Anne Michel in Ljubljana, Slovenia. Photo credit Marieke van Erp.

What is a smellwalk?

A smellwalk is a sensory method which investigates the human perception of smells within any given environment, especially within the fields of urban planning, art and design, history and ethnography. It is used to determine what a place smells like and can also be used to investigate the influences of smells on the people perceiving them. During a smellwalk, it is important that participants focus on their sense of smell as their primary sense of knowing and are encouraged to report their sensory experiences through written and/or oral form. When used as an exploratory method in heritage institutes, participatory smellwalks done in groups are most effective.

In this chapter we separate the process of conducting a smellwalk into what should be done before, during and after. Organising a smellwalk requires deciding on the aims of your smellwalk, getting to know the location and gathering participants. The guidelines are meant to provide you with informative and detailed tips from which you can choose and adapt to your own needs.

Before

Decide on the goal: Before going on a smellwalk, you should decide on your goals. Why do you want to conduct a smellwalk and what do you want to get out of it? As a heritage institute, you can use smellwalks to help participants experience the space or the collection in a new way or raise awareness around the importance of the sense of smell when engaging with your collection. Do you want to collect data from the participants during the smellwalk? If so, what kind of data do you want to collect: written, oral, etc.? Why do you want to collect that data and do you have an end-goal?

Reflect on the fundamentals: Where will you conduct the smellwalk and why? How many participants do you want? How many smellwalks do you want to conduct? Do you want participants to interact with each other throughout the duration of the smellwalk or would you rather them keep their comments and reflections for the end?

Decide on a Smellwalk Location: When you conduct a smellwalk, you may want to explore a specific location which requires permission to enter or explore. As a heritage institution yourself, it may be contacting colleagues within your own institution to ensure accessibility to certain rooms. Communication with the community can be helpful throughout the process. Establish contact with people who know, work, or live in the place you want to explore through smellwalking to ease communication and advertising of the smellwalk.

Gathering Smellwalk Participants: Keep the smellwalk group under 12 participants. Larger groups can complicate keeping everyone involved and engaged. You can offer advance registration, either through an online platform or by email. Collecting last minute participants is also possible by communicating the smellwalk on location in the day(s) and hour(s) before. Do consider how participation of these individuals may affect your intended outcome. Establishing your smellwalk group may also include advertisements on your institution's social media networks and preparing press texts and images in advance. An example of a smellwalk advertisement for a smellwalk led at the Museum Ulm, Germany by Victoria-Anne Michel below:

What does the Museum Ulm smell like?

Train your nose, smellwalk in the museum and inform Victoria-Anne Mische's PhD research within the Odeuropa project. You will be guided around for an hour and a half throughout the museum and will be asked to report about what you smell in a form. Thus, your participation, words and observations will help to draw the museum's diverse smellscapes!

Disclaimer: if you worry about not having "enough nose" or "the right words;" be reassured: the researcher and the form are there to guide you in the process of describing your olfactory impressions. Plus: it is your words that have value for this investigation - we are not searching for expert vocabularies but for personal reflections.

Entrance to the museum will be free for all smellwalk participants. The smellwalk host will speak English, but you can write in the language you are most comfortable in. Please bring along a bottle of water and **do not wear perfume or other scented products.**

Looking forward to smellwalking with you!



Caption: Smellwalk participants filling out smellwalk documentation forms for a smellwalk led by Victoria-Anne Michel at Museum Ulm in Germany. Photo credit to Victoria-Anne Michel.



Caption: (left and right) Odeuropa team members participating in a smellwalk through the depot of the National and University Library Slovenia. Photo credit to Sofia Collette Ehrich.

Preparing Practically and Mentally for the Smellwalk: Preparing practically for a smellwalk requires both a good understanding of the location and a readiness for the smellwalk path and participant experience. It is helpful to have a basic understanding of the main characteristics of where the smellwalk takes place and prepare a route in advance. This may mean the location's history, the current function of the location and the activities that happen there. For your smellwalk, you will need to bring water-resistant pens, pencils, clipboards, and colour markers. Preparing mentally for a smellwalk is also important. It is important to trust in yourself, especially because the smellwalk is a novel method. You must believe in what you are doing while keeping an open, iterative and experimental approach. It is helpful to prepare a short text about why you are conducting a smellwalk and how you want to do it.

Smellwalk documentation: There are two examples of smellwalk form templates that you can use. The forms created by Victoria-Anne Michel and Kate McLean offer two different approaches to collecting data from participants, while both share a similar process of describing smell reflections first, and analysing second. McLean's *Smellfie Kit* is more oriented towards data collection for subsequent visual representation, such as smellmaps. Michel's smellwalk template is more geared towards verbatim collection of smells in the form of memories and sensory analogies. Michel's form is text-based and includes an oral debrief at the end while McLean's integrates mini debriefs after each section. You can decide which one you prefer! Before the smellwalk, print one form per participant, so participants can write and reflect on them individually throughout the walk.

For Victoria-Anne Michel's Smell walk form, see [Smellwalk Form \(OST Resource 4\)](#).

For Kate McLean's Smellwalk form (AKA the *smellfie kit*), you can download it via her website [here](#).

Ethical clearance: If you are conducting smellwalks to gather data for research purposes, you may have to obtain ethical clearance (academic requirement). Ethical clearance usually means that participants receive an information sheet and can decide to sign their consent or not. Make sure that you consider the time this step requires.

Offer a Reward: We recommend preparing a little something to give to the participants as a thank you for their participation: a sticker, a blotter dipped in an odorant, a small bottle of a fragrant composition or a raw material (essential oil, diluted resins, synthetic molecules), for instance.

During the smellwalk

Launch of the smellwalk: Once you have gathered all the participants, you can begin with a short (under 10 minutes) 'speech' about who you are, why you will conduct a smellwalk, what will happen during the smellwalk. Check whether everyone understands what will happen. Rehearsing your 'speech' is important to make sure that you come across as clear and concise. We have noticed that participants appear sceptical or dubious at first. We usually acknowledge this by reassuring them that these apprehensions are normal due to the fact that most of us are not used to paying attention to smells or describing them with words. A smellwalk implies adopting a nose-first approach, which can be strange and difficult given our cultural habits, but the sole process of trying is already valuable. We often say frustration is part of the smellwalk. Encourage participants to report the absences of perception as well as the difficulties in describing their perceptions.

Leading the smellwalk: While leading the smellwalk, we advise to walk at a reasonable pace to make sure participants can take in the whole environment. We also suggest that you encourage limited discussion during the smellwalk as too much conversation can greatly influence or distract people's

personal experience. We believe that no matter how the smellwalk turns out, it always produces value for the participants and yourself. Be ready and open for spontaneous comments and happenings. Spontaneity is part of the method.

Wrapping up: Inform participants that the smellwalk is over, thank them for their time and contribution, and open for reflection. We recommend asking for these reflections while participants still have their smellwalk documentation form in their hands. This makes the discussion easier as they have their comments at hand. We believe debriefs are valuable both to collect more data – individual recountings often trigger rich exchanges – and to help improve the format. At the end of the walk, and depending on the goal of your smellwalk, you can now collect the forms and distribute rewards.

After the smellwalk

Reflect on the experience: Once the smellwalk is over and the participants have left, you can think together with your colleagues on how the smellwalk went and if the location and route was successful. Were your participants engaged and did they learn something new about the collection? It is helpful to write down reflections from your own experience leading the smellwalk and discuss them openly.

Presenting Smellwalk reflections: You could use the data collected for research and/or presentation purposes. For exploration of the communal spaces of a heritage institute, you may visualise the reflections through wordclouds, paintings, or poems and present them in the space for future pondering. This not only invites the public to think about the olfactory impressions of this heritage institute or site but it also captures how these places may change (olfactorily) throughout time.

The power of smellwalks

Conducting a smellwalk is a challenging, stimulating and rewarding process. Being well prepared is essential but this should not get in the way of spontaneity and improvisation. These two aspects are important to a smellwalk as they ensure a successful experience for both the participants and the leader(s). It is important to come out as well-rounded while empowering the smellwalkers in trusting their olfactory perceptions and knowledge. Knowing by smelling is unusual but promising - and smellwalking is a great way to test this.

Would you like to conduct your own smellwalk but do not know how to start? [See Resource for Using Smellwalks for Olfactory Storytelling \(OST Resource 5\).](#)

CASE STUDY #1
Reconstructing a Perfume from Historical Texts

Ineke Huysman, Senior Researcher, NL-Lab/Huygens Institute, the Netherlands

Website:

<https://brievenconstantijnhuygens.net/2022/04/10/riekend-water-van-mijn-moeder/>
<https://www.hofwijck.nl/>

Many heritage institutions hold rich (digital) collections filled with historical texts that offer insights into what life was like throughout time. Researcher and scholar, [Ineke Huysman](#) spends much of her time in various archives, looking through correspondences of Dutch statesmen and women. While doing so, Huysman stumbled upon the perfume recipe book of [Constantijn Huygens](#) (1596-1687). Inspired by his perfumes, Huysman set out to recreate some of his recipes in collaboration with the [Geheugen van Geur](#) (*Memory of Scent*) team of [De Jonge Akademie](#) in Amsterdam, the Netherlands. This resulted in the project [Ode de Parfum: To My Mother](#) (1635) and was a collaboration between various academic disciplines, which shows how interdisciplinary and complex olfactory related projects can be.

This case study captures Huysman's personal thoughts and experiences from working together with the [Geheugen van Geur](#) team on the recreation of Constantijn Huygens' (1596-1687) [Ode de Parfum: To My Mother](#) (1635).



Caption: The whole Geheugen van Geur team, from left to right: Daan Sins (Founder and Co-owner of [Huygens Paris](#)), [Marypierre Julien](#) (Senior Perfumer at [Givaudan](#)), [Maureen van Dam](#) ([Brein in Beeld/Vrije Universiteit](#)), [Marjolijn Bol](#) ([University of Utrecht/De Jonge Akademie](#)), [Nadine Akkerman](#) ([Leiden University](#)), [Ineke Huysman](#) ([Huygens Instituut/NL-Lab](#)), [Geeske Bisschop](#) ([Royal Collections/Huygens Instituut](#)), [Hanneke Hulst](#) ([Leiden University/De Jonge Akademie](#)). Photo courtesy of Ineke Huysman.

Who is 'Geheugen van Geur'?

'Geheugen van Geur' is an interdisciplinary team that contributed to the recreation of one of Constantijn Huygens' (1596-1687) perfumes during the project [Ode de Parfum: To My Mother](#) (1635). The team included a perfumer, a neuroscientist, an art historian, and multiple scholars. [Ineke Huysman](#), one of the scholars on the project, is a senior researcher at [NL-Lab](#) and the [Huygens Institute for the History of the Netherlands](#). Huysman is currently the coordinator for research projects around the letters of Constantijn Huygens, Johan de Witt, and Dutch and Frisian Stadtholders' Wives, in which the correspondence is being digitised and made accessible through an online database.

Why did you choose to reconstruct this particular perfume and what did you hope it would communicate?

Constantijn Huygens was a man of many trades. He was a politician, a poet, and a perfumer (amongst other things). During his lifetime, he created and wrote down over 150 perfume recipes. Huysman emphasises that she "especially wanted to create the scent that reminded him of his mother (in Dutch 'Rieckend water van mijn moeder') to make people aware of how much scent, memory, and emotion are connected."

The aim of this collaborative project is to show both educational and historical impressions. Huysman hopes that through the reconstruction of the perfume, sniffers can gain a better understanding of Huygens' himself and historical perfumery practices.

How was the perfume recreated based on its historical text?

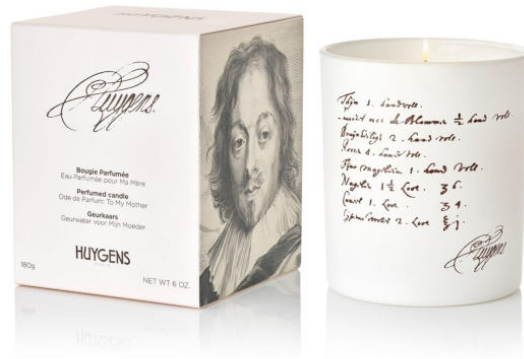
A key part of the research into the scent composition was using authentic distillation methods which Huygens would have used. When recreating the original scent by hand, Huysman and the rest of the team were careful to follow Huygens's recipe as closely as possible, by for example using the steam distillation method or by using the plants from his garden in his country house [Hofwijck](#), which is still accessible as a museum today in Voorburg, the Netherlands. Based on the team's research results, [Marypierre Julien](#), senior perfumer at [Givaudan](#), was able to create the final perfume.



Caption: The Huygens perfumery exhibit at Huygens' Hofwijck. Photo courtesy of Ineke Huysman.

In what ways did you invite people to engage with Huygens' perfume and history?

At the [The Huygens perfumery exhibit](#) at his [Hofwijck](#) country house in April 2022, the Geheugen van Geur team helped create several ways to engage with the historical and sensory content of the project. There was a designated table where visitors could experience the scent as a spray as well as interact with the raw materials from the recipe like nutmeg, cinnamon, and lavender. Additionally, the perfume was commemorated as a candle created by the French apothecary, [Huygens Paris](#), which the public was able to buy on site or online, which helped spread the word about the project even further.



Caption: The candle of Huygens' *To My Mother* perfume with the fragrance by Marypierre Julien. The candle was created by Huygens Paris and is sold on [their website](#). Photo credit to Antoine Kralik.

Alongside the exhibition and the candle, the project is explained on the Making Scents of the Past [website](#), which features a [video](#) detailing the process. Communicating the project through various informative outputs, like a video, website and exhibition, is important to explain and showcase the depth and versatility of the conducted olfactory research, which can be more difficult to grasp for the general public. These resources are helpful as they inform audiences about the goals and process of the project through audiovisual material.

In your experience, how does engagement with smells contribute to worthwhile storytelling in heritage institutions?

“It is when history comes alive - so to speak - by involving scent. For most people, smell is something so essential, everyone is interested in it. Even those who may have nothing to do with history can be stimulated in new ways and take interest.”

CASE STUDY #2

Olfactory Storytelling Used for Visitor Access and Education Design

[Marie Clapot](#), Sensory Museologist and Educator, The [Metropolitan Museum of Art](#), New York City, USA
Website: <https://www.metmuseum.org/>

Sensory methods can be used in heritage spaces for various reasons. Sometimes to heighten immersivity, connect visitors with new and hidden narratives or to increase memory. However, the inclusion of multisensory engagement can create a more inclusive environment for those with disabilities. The 'white-cube,' in which heritage spaces are often classified, can be non-inclusive for many visitors. For Marie Clapot, curating with scent has been a source of creativity and inspiration for making the [Metropolitan Museum of Art](#) an inclusive place for all.



THE
MET

Photo credit to Filip Wolak.

Who is Marie Clapot?

[Marie Clapot](#) is a sensory museologist, disability justice advocate, and associate museum educator for accessibility at the [Metropolitan Museum of Art](#) in New York City, USA. She crafts sensory-based programming, including olfactory events for disabled and non-disabled visitors and implements museum-wide strategies to embed olfactory practices in interpretation.

How is the Met working towards creating more accessible environments?

Clapot shared with us that curating sensory experiences to connect disabled visitors to art has been a hallmark of The Met programming for decades. They employ several sensory-based strategies, mainly

focussed on touch movement and sound, to connect the visitor (e.g. disabled people) with inherent sensory dimensions of artworks. For Clapot, working with scent provides a new opportunity to engage visitors with art through the senses, gaining a different knowledge perspective. For her, this is through the historical context of the work and its materiality.

Marie Clapot's thoughts on using olfactory storytelling to expand modes of curation for accessibility efforts:

#1. "Olfaction has a direct pathway to the limbic system or the human memory and emotional processing centre. This makes it a powerful tool to bypass language. When working with visitors who are non-verbal or speak another language, scent can act as a mode of communication in and of itself."

#2. "When we lead an olfactory experience for participants who are blind or partially sighted, we also use verbal descriptions as a process of organising and editing the information that we take in visually. That combination of cross-modal engagement, scent, and description can enrich the exploration and description process by increasing focus as well as bringing language associations across the senses."

#3. "When utilising scent as a means of access, I would recommend anyone to be intentional in designing the olfactory experience keeping in mind that each sense provides us with specific information, meaning olfaction is not a substitute for vision nor touch. If working with blind visitors for example, other modalities like touch and description would also be necessary to optimise access to the work."

#4. "Our focus is to develop educational programmes for disabled people, but these sensory programmes are also beneficial for a wide variety of audiences including, youth, teens, families, adults, and educators."

Marie Clapot's thoughts on how to safely present scents and choose topics for the use of olfactory storytelling, curation and design:

The choice of smell distribution is very important and focusses on three main principles. Firstly, Clapot feels that visitors should be able to preserve their agency while smelling. Secondly, she always aims for visitors to have an optimal smelling experience while also controlling the spread of scent into other galleries or spaces. Lastly, versatility is important. The use of blotters and raw materials (ex. resins, incense woods, fruits, flowers, etc.) is most attractive since it has little production time and is affordable.



Caption: Participant of a workshop for educators at the Met sniffing a blotter. 2015. Photo courtesy of Marie Clapot.

In terms of ensuring a safe experience for the heritage institution's staff, visitors, and spaces, Clapot recommends retaining open communication between all departments. The conservation, curatorial and scientific research departments can assist with determining safety protocols for the works of art, staff, and visitors, as well as to receive guidance on resources about the objects. She also recommends including disclaimers or signs that well inform visitors when a programme or an exhibition includes scents.

She emphasises that it is not just the presentation and safety that is a key part of olfactory storytelling but also the subjects presented. When choosing topics of olfactory storytelling, she says that "the choices for olfactory storytelling are informed and guided by our collection and the exhibition programmes of the museum itself. We look at these exhibition topics and see if there is a link with or an angle available of olfactory storytelling. This could be through specific objects, but also relate to the wider theme of the exhibition." A good example for this is the public programming around the Met's exhibition in 2019 titled *The Tale of Genji: A Japanese Classic Illuminated*.

The [Tale of Genji: A Japanese Classic Illuminated](#), focussed on the artistic tradition inspired by Japan's most celebrated work of literature, *The Tale of Genji*. It highlighted through various [objects](#) a little-known history of the tale which is its connection to *Kodo*, or incense appreciation and preparation. *The Tale of Genji* literature was the basis for "Genji-ko," a game involving incense. In short, the game is centred around five different types of incense which players are tasked to distinguish by their fragrance. Clapot led two Genji-ko sessions at the Met: one for adults and another for multigenerational audiences during a programme called [Family Afternoons](#).



Caption: A family participating in the “Genji-ko” incense game at a Met Family Afternoon. 2019. Photo Courtesy of Marie Clapot.

Why Marie Clapot believes that olfactory storytelling contributes to worthwhile storytelling in heritage institutions:

#1. “It provides visitors with more choices for how to experience the museum, and offers a new way to connect with works of art.”

#2. “It can be a conduit to accessing knowledge as well as a delightful way to learn about art history.”

#3. “Olfactory storytelling is at the centre of diverse artistic explorations and cross-disciplinary partnerships. It is a powerful tool in fostering meaningful conversation amongst staff, visitors, and external contractors.”

#4. “Scent is an important medium to incorporate into the public space as smelling encourages us to slow down and spend more time in front of an artwork. More than the other senses, smell simultaneously brings you into the moment and breaks down boundaries of time and space by recalling past memories and emotions.”

Marie Clapot’s advice for starting your own olfactory events:

#1. “When utilising scent as a means of storytelling, I recommend to be intentional when designing the olfactory experience and to keep in mind that each sense provides us with specific information - olfaction is not a substitute for vision or for touch.”

#2. “It is crucial to think through what added value(s) the scent will bring: does it support the exploration and understanding of the work of art, should it be historical, aesthetic, etc., and is the use of scent appropriate for your targeted audience?”

#3. "Tuning into senses other than vision does not necessarily come easily to us. To assist this process, I often start sensory tours with a meditative exercise encouraging participants to bring awareness to their body and senses. Specific to olfactory storytelling, I remind participants that the point of engagement is not to guess what specific scents are, but to be curious about it."

#4. "Keep in mind that smell experiences - conscious and unconscious - have a memorable impact on our psyche. I have experienced first-hand how scents can trigger memories that we did not know we had. This raises the challenge of smell as a medium. Difficult memories could be triggered and be dysregulating for some, potentially creating distress and other painful emotions, impacting the visitor's museum visit."

Section 2: Creating a Heritage Scent

Now that you are equipped with the tools and information that you need in order to seek olfactory narratives within your own (digital) collection, **how do you interpret that material into scented material safely and efficiently?** Of course, a crucial part of any olfactory event are the smells themselves. However, acquiring and developing fragrant raw materials and smell compositions takes specific knowledge, research, and planning - especially when it is the first time your institute engages with olfactory storytelling.

This section covers two main parts of the heritage scent development process. Firstly, we define what a heritage scent is and how to identify and classify them. Secondly, we outline methods for how to acquire, develop and evaluate heritage scents. These processes often require collaboration between different types of people (curators, scholars, scent designers) which can raise challenges in workflow. To assist and streamline these processes, we provide details for using helpful and informative worksheets.

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
What are heritage scents?	How to acquire fragrant materials?	Considerations for using malodours for olfactory storytelling.	How to develop a heritage scent with a scent designer?	How to evaluate heritage scents?
In this chapter we explain what heritage scents are and how you can choose between different types of heritage scent representations.	This chapter will help you better understand what types of fragrant materials can be used and how you could acquire them.	Heritage Scenting Consultant Liam Findlay discusses how olfactory storytelling with malodours can be a beneficial tool in heritage environments.	This chapter provides information about how to create a heritage scent with a scent designer, from beginning to end.	This chapter helps you evaluate the developed heritage scents: do they narrate the story you intended?

Chapter 1: What are heritage scents?



Caption: Olfactory materials set up for the filming of the Odeuropa project on the BBC Travel Show in 2022. Photo credit to Sofia Collette Ehrich.

What are heritage scents? In section 1, we focused on detecting narratives that can be used for the use of olfactory storytelling. These narratives may employ scents which were or are significant to a specific culture and that may have been depicted or described in images and texts. Many heritage scents capture fleeting concepts, like historical smellscapes or practices. How can we bring heritage smells back to life and use them as a tool of public engagement? In this chapter, we outline the different types of heritage scents creations that can be created for the use of olfactory storytelling.

All heritage scent representations - whether reconstructions or recreations of historical recipes - are *interpretations*. Therefore, we suggest documenting all the steps made in the interpretation process. This documentation can later also be used in the presentation to the public.

Types of heritage scent creations:

We propose the following classification scheme for heritage scents developed for the use of olfactory storytelling. Note that all three types should be treated and communicated as interpretations for authenticity purposes:

Materially Informed Reconstruction: Many odorants that exist from the past are still sniffable in their original form. Materially informed reconstructions start from a physical object or space which can be smelled (on site or perhaps in your depot), considered and potentially evaluated throughout the development process of the smell interpretation. Creations can be informed via a trained nose (ex.

perfumer) and/or GCMS analysis. Examples may include single ingredients with cultural significance like historical resins, scented toys, or residue of medicinal materials in an apothecary cabinet, or compositions like famous perfumes or the smellscape of a rare book room.

Historically Informed Interpretation: Historically informed interpretations do not *need* to start from a material but rather are informed via a historical source (e.x oral history, article, household recipe book). These can result in both object related smells and environmental smells and a scent designer can help to interpret and represent certain olfactory clues. Those who create these interpretations must keep in mind that due to the evolution of olfactory materials and the olfactory imagination of the scent designer, authenticity should be treated on a scale. The goal is to remain as historically accurate as possible.

Artistic Translation: Works of art, historical artefacts, and environments can be the starting point for more artistic smell creations. The goal, in this case, is not to be historically accurate or to convey a historical sensation, but to draw the attention to certain qualities of objects and artefacts. For example a colour, a contrast, a material, a general atmosphere or mood, etc. The scent designer can have more freedom in this case, but the curator must clearly communicate the aspects of emphasis.

Subcategories

The following subcategories can fall under each of the above types:

Single Ingredient Representation vs. Smell Composition: Single Ingredient Representations are for (historical) smell narratives that can be told via one ingredient or essential oil. Due to their simplicity and familiarity, they can have a high impact on visitors and are easily accessible for museums. Smell compositions are those which represent (historical) smell narratives via a mixture of multiple ingredients together.

Malodours vs. Fragrance: Defining what is malodorous (foul smelling) versus fragrant is challenging due to the dependence on cultural backgrounds, individual preferences, and context. Malodours can raise negative reactions in participants like disgust, however, foul as well as fragrant smells are part of cultural history and can enhance historical connections and add to the theatricality and overall emotional response to storytelling. Based on research, storytelling with a balance of both malodours and fragrances can be effective. However, we recommend that when presenting smells for the use of olfactory storytelling, a malodour is not the concluding or only smell.

Example: Curating with Malodours:

A malodorous curatorial challenge came from the [Whitechapel Fatberg](#) – a gigantic mass of wastewater grease, put on display by the Museum of London in 2018. Because of the health threats, the fatberg smell was not exposed to the public. The only nose witnesses to the stench are the sewer labourers who dug it up, and the curators of the museum. They report how after the curatorial process of drying the fatberg, the smell turned from active sewer to damp basement. The story shows how the curation of historical objects is often not conducted with the conservation of smells in mind. It also indicates that

malodors, although they have a high significance for the past, are even more of a challenge to feed into the loop of historical learning.

Chapter 2: How to acquire fragrant material

Acquiring fragrant materials for the use of olfactory storytelling can fall on a scale of simple to more complicated. In many cases topics of olfactory significance can be narrated through single ingredients and this has become a popular practice in heritage institutes. For example, in the exhibition, [Asia in Amsterdam. Luxury in the Golden Age](#) (2015-2016) the Rijksmuseum presented nutmeg, cloves and cinnamon to narrate the development of global expansion. Odeuropa's *Follow Your Nose! A Guided Tour with Smell* (2022) in collaboration with Museum Ulm used the raw materials of frankincense and myrrh to narrate one of their paintings depicting the Adoration of the Magi. Myrrh was also presented in *Fleeting – Scents in Colour* at the Mauritshuis, The Hague (2021), to discuss the bitterness of Christ's fate, as was ambergris – in connection with an engraving of a beached sperm whale.

Raw materials - essential oils, herbs, and resins - can be ordered (online) via drug stores, health shops or aromatherapy websites. However, it is important to note the quality and availability of materials. For example, some types of essential oils are cultivated for their fragrant intensity and in many countries animal-based odorants such as civet, ambergris, musk and castoreum, are not for sale anymore. Basic research and expertise may be required and it is important to consult a scent designer when you are unsure.



Caption: Odeuropa team member, Sofia Collette Ehrich preparing blotters. Photo credit to Marieke van Erp.

Types of Materials:

Scents used for olfactory storytelling can come in different forms and materials. The form of the material depends on how the scent is presented for a particular olfactory event. Definitions and examples of use are shown below:

Material Type	Description	Examples of Use
Alcohol-Diluted	Typically 1-3% odour material and +/- 95% alcohol, alcohol diluted materials is typical in the fragrance industry. Essential oils can also be diluted in alcohol.	Alcohol-diluted olfactory material is used in various ways but mainly in small glass (amber) bottles for the dipping of blotters or (glass) spray bottles to use on hand-fans.
Pure (Perfume) Oil, Essential Oil, or extracts	Pure oil is a material that is not diluted. Due to their high concentration, it is important to handle them with care.	Pure oils can be used for smell presentation methods that require dry diffusion (ex. Handheld dry diffusion).
Micro-encapsulated Material	Micro-encapsulation is a protective or preservation process an olfactory material can go through. It creates a highly concentrated and viscous liquid.	This material is necessary for the creation of Scratch and Sniff or Rub and Sniff technology.
Dry, olfactory materials	Materials with inherent olfactory properties (ex. resins, wood and seeds).	These materials can be used in a variety of olfactory events such as workshops, presentations, and educational programs. Note: take care that these materials are dry and clean. Inform users of any potential allergens.

Chapter 3: Considerations for Using Malodours in Olfactory Storytelling



Caption: Headshot of Liam R. Findlay.

The following section was written by Liam R. Findlay, Heritage Scenting Consultant and Manager at AromaPrime, which has been providing historical scenting for museums since 1973. His roles involve advising on effective scent application methods, and also overseeing the development of historical aromas. Liam's experience designing educational interpretation, including interactive signage, immersive theatre and historical escape rooms, informs his work for AromaPrime. Through his recreational project *The Smell of Immersion*, Liam studies the uses and implications of scents in themed visitor attractions.

Setting the Stage for Malodours

Unpleasant smells can allow for a more striking and memorable learning experience. For example, in the Imperial War Museum's World War I mock trench (1990-2013), a smellscape of cordite, toxic fumes, vomit and urine sparked profound feelings of empathy in the visitors, for the soldiers who had inhaled these ghastly flavours in the past. Meanwhile, in the family-focussed exhibition *Flushed with Pride* (2002) at the Gladstone Pottery Museum, the recreated stink of 19th-century toilets led to engagement, as visitors were able to dare each other to take a sniff, learning something about historical hygiene and diets along the way. Malodors can also function as an instrument for crowd control in museums. In my capacity as a Heritage Scenting Consultant, I have worked with a castle where a malodour was diffused with the hidden function of preventing crowding in a narrow walkway.

Controlling Malodours

Despite the many benefits, curators may be concerned about how to control the spread of malodours at their venue. The solution largely depends on the format of the exhibition, and whether the diffusion method is ambient (spreading a smell through the air) or limited (e.g. contained below a lid or within an interactive pump).

Jorvik Viking Centre in England is well-known for its **ambient diffusion**. Here, visitors are taken through an odiferous, life-size Viking village, where aroma oils are diffused from automated machines. The Viking village is in a room separated from the rest of the museum, and it is well ventilated, ensuring the odours do not intrude where they are not welcome. Modern scent machines allow the user to control the intensity and regularity of diffusion, meaning odour potency can be adjusted.



Caption: A photograph (c. 2000) of AromaPrime diffuser models that were used by Jorvik Viking Centre from its opening in 1984. Photo courtesy of Liam R. Findlay.

If ambient diffusion happens in a space open to the rest of the venue, **dry diffusion** is another recommended approach. This involves the use of a scented object, rather than diffusing oils. Several National Trust sites have placed Aroma Blocks in their rooms. An Aroma Block is an absorbent scented object, placed within a lidded case. The smell tends not to spread much further than three metres.



Caption: An open Aroma Block case hidden among a room's furnishings. Photo courtesy of Liam R. Findlay.

Venues can also try limited or **contained diffusion**. Madame Tussauds Vienna's exhibition *Sisi Uncovered* (2017) has small, labelled drawers that can be sniffed upon opening. When creating a smelly timeline for the exhibition *Two Centuries of Stink: Smell Mapping Widnes Past and Present* (2021), Kate McLean encased malodours inside boxes with tiny holes on top, so the smells could only be detected upon close

sniffing. To explore another hands-free, covid-safe approach in 2021, AromaPrime and the Bolton Museum collaborated to create a foot-operated pump which could puff out the smell of bear faeces. The effect proved to be noticeable yet fleeting. For tours and group sessions, malodours can be limited to sample sticks, scented fans, scratch 'n' sniff cards or pocket-sized Aroma Cubes, to give a few examples. Malodours are also less likely to offend when the visitor has the choice to activate them, which is where the more contained applications can be useful.



Caption: Contained diffusion method at Two Centuries of Stink: Smell Mapping Widnes Past and Present, curated by Kate McLean and Jade French for the Catalyst Science Discovery Centre and Museum (2021). Photo courtesy of Kate McLean.

Visitor Comfort

Different approaches can be taken to avoid discomfort among visitors when using malodours. Aside from the risk of making visitors feel unwell, a strong smell paired with an emotionally loaded subject matter could cause distress. It can be advantageous to test a malodour with different audiences before applying it, to gauge how the public will respond. When developing a scent to accompany the Natural History Museum's animatronic T-rex in 2001, AromaPrime first created a stench based on the rotting meat stuck between the creature's teeth. However, after testing samples, curators decided that a prehistoric swamp smell should be used instead, so visitors could experience the atmosphere without feeling overwhelmed. If a topic is sensitive, signage can also be used to prepare visitors for malodours.

In 2021, I worked with a venue whose damp, claustrophobic tunnels sometimes made visitors feel unwell. Therefore, when applying historical scents, we were conscious that they should not enhance any feelings of sickness. To overcome this concern, we applied traditionally pleasant smells to represent the malodours. For example, when paired with the setting of a house riddled with plague, the aroma of smoked fish could be perceived as a malodour, while its underlying pleasantness kept it bearable. Sometimes, having a smell surrounded by contextual cues can help communicate the idea of unpleasantness, without the smell itself needing to be repulsive.

The Power of Malodours

During the 2020 coronavirus lockdowns, one of AromaPrime's main sources of income was the sale of malodours to visitors of historical attractions. These customers could no longer go to their favourite sites, and being able to sniff the stables from Warwick Castle's Kingmaker exhibition, or the torture chamber from The Edinburgh Dungeon, helped transport them back to happy days out. This phenomenon may seem surprising, but I feel it reflects the unique power of malodours as tools for engagement and memorability in learning experiences.

Chapter 4: How to develop a heritage scent with a scent designer?

Heritage scent creations that are developed specifically for the use of olfactory storytelling differ from perfumes in that their goal is specifically to convey a historical narrative connected to heritage objects, sites or practices. Choosing and creating olfactory materials can require research, creative interpretation and chemical analysis, or a combination of these. The work processes and classifications of scent designers also vary: olfactory artists, scent marketing bureaus, fragrance companies, flavourists, perfumers and olfactory scenographers. It is important to keep this in mind when hiring and working with your own scent designer.

Tips for working with a **scent designer**

1. **Get to know your scent designer:** Different types of smell creators have different kinds of expertise. It is helpful to know the background of the scent designer that you work with to ease communication. Perfumers are often trained to make pleasant scents. When you want to work with malodours, make sure they feel comfortable taking on this process.
2. **Provide documentation and materials:** It is important that the scent designer has access to resources that help them create the heritage scent. This may include information about the artwork/object being interpreted, visual aids, material descriptions, and (art) historical context.
3. **Encourage additional research:** Encourage on site visits where the scent designer can have an in-person experience of the GLAM space and artworks. This may include handling and smelling of the objects and/or interviews with relevant individuals and communities. Evaluation and testing of the effect of the scents should be done via test tours which include diverse audiences.
4. **Maintain open and straightforward communication:** It is important to bring the scent designer into the olfactory event development process early on and to communicate key parts of the event like number of desired smells, target audience, duration of the event, and desired level of interpretation or creative liberty.
5. **Safety first:** Remember to collect safety sheets for each scent as visitors may have questions regarding allergens. This documentation also is important should you want to travel with the scents or ship them for communication purposes.

Using Odeuropa's *Heritage Scent Design Brief* and *Heritage Scent Development Report*

Throughout the coordination Odeuropa's events (2020-2023) we learned that due to the interdisciplinary process of creating heritage scents, many challenges can arise. Scent development brings together scholars, curators, consultants, and scent designers, joining diverse thinkers and work processes. To assist and support following the above tips, Odeuropa created a two-part worksheet: the *Heritage Scent Design Brief* and the *Heritage Scent Development Report*.¹

Part 1: The **Heritage Scent Design Brief** is to be filled out by the commissioner of the smell and outlines the necessary information for the perfumer to make that particular smell interpretation. This includes details of the project such as location, olfactory event type, and duration of the event. This document also includes (historical) background information like visual material, the official description of the interpreted artwork, intended function and olfactory relevance. Upon completion, this document should be given to the scent designer.

You can download the *Heritage Scent Design Brief* for your own use. See ***Worksheet Heritage Design Brief (OST Resource 6)***. Unsure of what content goes where? See ***Example of Heritage Design Brief (OST Resource 7)***.

Part 2: The **Heritage Scent Development Report** is to be filled out by the scent designer. It offers an opportunity to reflect on their experience of creating a heritage scent, and to describe the creation process and the final scent in their own words. The report also requires the perfumer to provide detailed information about the materials of the creation, for example the olfactory pyramid and/or the exact formula. This part is especially important, for it helps to understand how the perfumer followed the historic recipe, if provided, and it provides information that can be used to describe the heritage scent to the public.

You can download the *Heritage Scent Development Report* for your own use. See ***Worksheet Heritage Development Report (OST Resource 8)***. Unsure of what content goes where? See ***Example of Heritage Development Report (OST Resource 9)***.

Chapter 5. How to Evaluate Heritage Scents?

Once you develop a heritage scent, it is important that you know how to evaluate the creation and how it suits your goal. Do the scents tell the stories that you want to narrate? How will visitors react to the creations? To assist and prepare the smell evaluation process, we created the *Guidelines for Heritage Scent Evaluation*, based on knowledge we gained during our own creation processes and interviews we conducted with scholars, scent designers and curators. These guidelines provide three different schemes that can be used for evaluating heritage scents, starting from the least structured approach to the most

¹ The Odeuropa *Heritage Scent Design Brief* and *Heritage Scent Development Report* were developed within the Odeuropa project and with the help of Museum Ulm, Germany and the perfumers at IFF led by Bernardo Flemming.

formalised one. You can find this document in our additional resources. To assist the use of this document, tips and a summary of each scheme is outlined below.

Tips for evaluating heritage scent creations:

- **Document the process:** Make use of Odeuropa's worksheets: *Heritage Scent Design Brief* and *Heritage Scent Development Report*. They provide clear instructions for the smell development process. Upon receiving the *Heritage Scent Development Report* from the scent designer, the process can be evaluated - did the designers indeed follow the instructions given?
- **No nose is alike:** Form a focus group representative of your different stakeholders (e.g. curators, tour guides, technical staff, communication and inclusivity officers, and a sample selection of your visitors or audiences).
- **Remain neutral:** on the day of smell evaluations, avoid wearing highly scented products and try to keep initial thoughts about the smells to yourself to not impact another's experience.
- **Even our own noses can change:** Beware that the human sense of smell is weakest in the early morning and that hormones will influence our perception of smell. Pregnant people might be much more sensitive.
- **Sniff with intention:** You can try long slow inhalations and short sniffs. The rhythm of our sniffing will influence what you smell. Also make sure to use both nostrils as they both perceive different molecules.
- **Encourage multiple versions:** Ask the scent designer to create different versions of a smell, so you and your group can evaluate the differences.

Overview of Evaluation Schemes

We have developed a guideline for evaluating heritage scents.² You can download the guideline for your own use. See [Worksheet Guidelines for Evaluating Heritage Scent Creations \(OST Resource 10\)](#).

Summary of scheme #1: Isolated Evaluation

Evaluation scheme #1 consists of individuals smelling each heritage creation *isolated* from any contextual information and background. During this process, evaluators smell each creation and note any individual reactions and associations on paper which is then followed by a group discussion. This evaluation method helps better understand possible initial reactions GLAM visitors may have when experiencing these scents.

Summary of Evaluation scheme #2: Contextualised Evaluation

Evaluation scheme #2 consists of individuals smelling each heritage creation *with* the scent's contextual information and background (about the intended olfactory event and the images, objects, or spaces in and around where the smell will be presented). The scheme helps check connections between the scent and its projected context, and evaluate whether the creation is convincing and understandable. A key part of this process is that the smell creations are evaluated within a context that is as close as possible to the final presentation.

² Odeuropa's evaluation scheme received feedback from Liam R. Findlay, Dr Kate McLean, Bernardo Fleming, and Nadjib Achaibou.



Caption: Capture of a post contextualised evaluation done with Odeuropa team members. Photo credit to Sofia Collette Ehrich.

Summary of Evaluation scheme #3: Peer Review

Evaluation scheme #3 consists of a formal and communal peer-review. This review scheme for smell creations can include curators, scholars, fragrance experts and scent designers to peer review the scent based on their own research and knowledge. This scheme includes contextual information about the scent as well as a short proforma to be filled out during the review process.



Caption: Whispi packages which were sent in the mail to reviewers as part of the Peer Review Evaluation Odeuropa carried out for a publication for the American Historical Review Journal. You can read more about that [here](#). Photo credit to Sofia Collette Ehrich.

CASE STUDY #3
Presenting Communal Heritage via Heritage Scents

An interview with sensory consultant [Tasha Marks \(AVM Curiosities\)](#) and curator [Claire Dobbin](#)

Website: <https://www.avmcuriosities.com/#/port-city>

Different heritage institutions have different themes and narratives to tell within their collections. In 2021, sensory consultant [Tasha Marks](#) and freelance museum curator Claire Dobbin worked together on the [London: Port City](#) exhibition at the [Museum of London Docklands](#), which highlighted the historical and cultural significance of working docks in London, UK. For an area of the exhibition focussing on the 20th century, emphasis was placed on the unique olfactory history of this area and time. For a collective and communal approach to the creation of the scents, Marks consulted oral histories from former dock workers which were selected by Dobbin and an active team of volunteers with personal connections to the area. Four smells were created to try and encapsulate the dockworkers' experiences and memories: The Warehouse, Handling Hides, The Docks, and Home (descriptions below).

This interview captures Marks' and Dobbin's personal thoughts and experiences from working together on the London: Port City exhibition. They discuss how they employed olfactory storytelling as a way of addressing and presenting communal heritage and at the same time, how they overcame challenges along the way.



A V M C U R I O S I T I E S

Caption: Tasha Marks with 5318008, a Scented Bronze Sculpture Commissioned for the [Being Human](#) exhibition. Photo credit to Angela Moore and provided courtesy of the Wellcome Collection.

Who is Tasha Marks?

Tasha Marks is a sensory consultant, scent designer and the founder of [AVM Curiosities](#). Marks has a history of working in the museum and cultural industries and created the olfactory identity for the

[London: Port City](#) exhibition at the [Museum of London Docklands](#). She is an advocate of the sensory museum, and champion of food and fragrance as artistic mediums. Past projects of her's include: [creating a sculpture that emits the scent of breastmilk](#) for the [Wellcome Collection](#), recreating the [smell of the New York Tenements in 1890](#) for the [Ulster American Folk Park](#) and animating a Georgian Dining Room with [an 8-course menu of scented napkins](#) for [The National Trust](#).



Who is Claire Dobbin?

[Claire Dobbin](#) is a freelance curator, educator and interpretation specialist, who curated the [London: Port City](#) exhibition at the [Museum of London Docklands](#). She is passionate about multisensory engagement, inclusive design, and the creative use of collections to engage and develop audiences. Her doctoral research, recent publications, and conference contributions focus on the benefits and impact of multisensory visitor experiences.



Caption: Display of Scents of Place. Photo credit to Tasha Marks.

Can you explain what you aimed to achieve through the use of olfactory storytelling in the exhibition?

Claire Dobbin: From a visitor experience perspective, it was to provide a change in pace within the exhibition, encouraging people to slow down and reflect. Curatorially, the goal was to bring another sensory dimension to extracts from oral histories, which help interpret the sensory environment and lived experience of London's historic former docklands in a more immediate way. In turn, we hoped this would enable visitors to connect and engage with the content on a more personal and emotional level.

How and why did you choose to use oral histories as the inspiration for the scents and how were these histories interpreted into physical scents?

Claire Dobbin: During the content planning process, we identified the need for the docks to be interpreted as a place that was experienced – that was a way of life – that was more than just a built environment and a feat of engineering. We knew that some visitors would have lived experiences and memories of the 20th century working docks and we wanted to include that and attempt to start a dialogue about it in some way. We also wanted to bring the stories within the oral history to life in a way that would resonate and have impact for the widest possible audience. Olfactory storytelling provided a way to meet these objectives, which were established within our interpretation planning process.

Tasha Marks: The creation and evaluation of the scents were based completely on the oral histories I received from the museum. By listening to these first-hand experiences, I was able to craft the olfactory identity of the exhibition. My aim was to translate the subjects' experiences into scent. My goal was to use their words, objects, sensations, spaces, and feelings and turn them into an aromatic experience that the contemporary visitor could relate to.

What was the biggest challenge of the scent development process and how did you 'evaluate' if the scents achieved their impact?

Tasha Marks: The biggest challenge was how to summarise 90 years of multiple people's lived experiences into a series of four smells. I had to translate individual histories into general impressions that would still do their stories justice. In the end, the four smells embraced this idea of the macro and the micro, to embody personal stories told in scent alongside atmospheric imaginings. For instance, the smell of 'Home' was based on one particular oral histories' story about a person's father's woollen coat drying on an electric fire, but it also aimed to evoke a sense of 1960s domestic life. To make sure the scent resonated with different audiences, I tested it on multiple groups including a group of volunteers whose family members had worked on the docks. When it evoked the feeling of home for them – one even going into depth describing her grandfather's wallpaper - I knew I had got the scent right.

The Heritage Scents of the London Docklands:

The Warehouse | Wooden containers, hessian sacks, concrete floors, coffee, tea, tobacco.

Handling Hides | Animalistic, musk, leathery, flesh, skin, bone, fishy, visceral, guttural.

The Docks | Smoky, industrial, smog, fog, coal, oil, engines, cold air, marine edge, wood, watery, brine.

Home | Warm, welcoming, comfort, coat drying by the fire, smoke, fire, vanilla, tobacco, wool, wood, 1960s wallpaper.

**These scents were created by [AVM Curiosities](#) in collaboration with [Aroma Prime](#) and [CPL Aromas](#).*

Commissioned and curated by Claire Dobbin and the Museum of London.



Caption: [London: Port City](#) exhibition view. Photo courtesy of the Museum of London.

How were visitors encouraged to engage with the unscented and scented content of the exhibition?

Claire Dobbin: The smells were informed by and displayed in conjunction with extracts from the oral histories, which recalled sensory experiences of London's docks between the 1920s and 1980s. The design of the physical space, which presented olfactory and aural/audio content, also drew on the

museum's photography collection. These images illustrated the different aromatic products that moved through and were stored in warehouses within the docks. Alongside the photographs were also historic samples of such products from the collection displayed. But the primary content in this section of the exhibition was always the smells and the stories that informed and inspired them.

Tasha Marks: As this exhibition was due to run for a number of months, the distribution method needed to be low maintenance. The number of nearby historical items also meant that it would be advisable to keep airborne droplets to a minimum, so it was decided that a scent chamber, which could be opened and closed would lead to the most visitor interaction, while also keeping the scent confined. The scents were further encapsulated onto EVA beads, which can hold 30% of their weight in fragrance - this increases the surface area and allows for a slow and steady diffusion, whilst also meaning there are no pools of liquid that might lead to spillages in the exhibition. This is my preferred distribution method in general as it gives the most flexibility in display and easy maintenance throughout the exhibition cycle.



Caption: Visitor's engaging with the exhibition's smell stations. Photo courtesy of Museum of London.

What precautions did you take to ensure a safe space for the Museum of London Dockland's staff, visitors, and collection?

Tasha Marks: The distribution method was important here. The scent chambers kept the fragrances out of reach so there would be no skin contact possible for the general public. The hatches also allowed the attendee to choose the experience, rather than the aroma filling the space. Meanwhile, for the staff, I provided safety data sheets for all the aromas, and a maintenance manual, which had instructions on how to handle and store the scent.

Visitor Reflections on *London: Port City*:

Visitors found the exhibition engaging due to the expert usage and variety of immersive multimedia, especially the moving images, large video projections, and audio oral histories. They also praised the olfactive time capsules as being very evocative of the past, such as the scents from the port.

“The wood smell is very overpowering in a positive way, which struck me.”

There was also positive praise on the way oral histories were paired with the different smells - “just such a really powerful way of bringing up memories.”

The wooden crates and scents from the port were the highlight of families and were perceived by adults as a very clear way to engage with the younger audiences.

“It was really nice. We didn’t spend very long there, my son is 3 and has a short attention span. But he enjoyed the wooden crates and scent boxes.”



Caption: [London: Port City](#) exhibition view. Photo courtesy of Museum of London.

In your experience of collaborating on this exhibition, what was the biggest challenge of using olfactory storytelling?

Claire Dobbin: The use of olfactory storytelling is not yet an established interpretive approach – and there is not yet an established way to evaluate its impact. As a result, evidence of its benefits and why it should be used more is not yet fully tangible. It is not always easy to convince museum staff and stakeholders of the role and importance of an olfactory dimension to an exhibition. That is why Odeuropa’s Olfactory Storytelling Toolkit is so important - and why more robust ways to evaluate the impact of olfactory experiences are needed. Providing tangible, generalisable evidence of why and how olfactory narrative experiences can enhance engagement and the memorability of exhibitions is the key to more being invested in for the future.

Tasha Marks: Our experience of scent is very individual, both in what and how we smell, as well as our own associations and memories attached to it. This means when using scent as a storyteller you cannot always predict the impression on the visitor. Scent is a subjective medium, but it is also our most suggestive sense, so by curating the interpretation around the aromas, including words and imagery, we are guiding the visitor to have the experience that we hope for them to have. Interpretation is key!

If you could offer one piece of advice to heritage professionals who want to use olfactory storytelling, what would it be?

Tasha Marks: If you are considering scent as part of your exhibition or museum display but are unsure where to start, it can be worthwhile hiring a specialist to advise. My role on this project - as well as others - was a halfway between perfumer and curator, and as such, I work across a range of expertise to refine the sensory offering. This way of working means the sensory offering is closely tied in with the rest of the exhibition content, adding to the atmosphere and enhancing the visitor experience.

Claire Dobbin: It is essential to factor sensory storytelling in from the start, so it can inform and be an integral part of the interpretation, content, and design development. Scents are too often an add-on - an extra layer to add at the end - rather than a core curatorial and interpretive tool. For smell to be a meaningful part of the narrative experience, it needs to be given the same amount of credit (and time) as text or audiovisual interpretation provisions.

Why is it important to safeguard and showcase elements of olfactory heritage in heritage institutions?

Claire Dobbin: Smell has been underused and underexploited in museums. It is an integral part of how we experience and remember our own lives - so when you think about it - removing it from narrative experiences in museums, especially social history museums, is ludicrous. For olfactory heritage and olfactory engagement to become an integrated element of museum collections and interpretation (which I believe it should be) it needs to be identified, documented, and exhibited - all of which require new ways of working and new research. Otherwise, it will always be the exception not the rule - and effective narrative experiences that draw on the many benefits of olfactory heritage for engaging audiences and helping us understand and interpret our past will remain disappointingly few and far between.

In your experience, how does engagement with scents contribute to worthwhile storytelling in heritage institutions?

Claire Dobbin: Audiences seem to engage with smell in a more intuitive, personal, and confident way within museum spaces than they do with artworks, objects, and text. In my experience, the inherently subjective nature of smells - or at least how they are interpreted - gives people the freedom to offer comments and responses, or start conversations with less fear of being 'wrong.' We are so much more confident to defend our 'taste' and opinions related to food and smells - in terms of what we like or dislike, how they make us feel, what they remind us of, or mean to us. This is exactly how visitors should

feel in museums - about the collections, narratives and spaces that are being developed and interpreted for them.

Tasha Marks: Scent is an unparalleled educational tool and unique avenue for learning. It enables us to craft a visceral experience in the mind of the viewer and infuse a long-lasting knowledge that goes beyond the gallery walls. Fragrance can draw the visitor in, infusing their mind with an unforgettable experience - using aroma as a storyteller, to tell a micro story of a macro world.

CASE STUDY #4
In Search of Scents Lost: Early Research in Employing Olfactory Methods for GLAM initiatives (2015-2019)

[Caro Verbeek](#), Curator of Mondrian and De Stijl, [Kunstmuseum Den Haag](#), the Netherlands

<https://research.vu.nl/en/persons/caro-verbeek>

[*In Search of Scents Lost - Reconstructing the volatile heritage of the avant-garde*](#) was a research project carried out as part of Caro Verbeek's creative industries PhD (supervised by Inger Leemans) at the [Vrije Universiteit Amsterdam](#). The project was a collaboration between the university and [IFF](#) (International Flavors and Fragrances) who developed the olfactory materials and compositions, and the [Rijksmuseum](#) in Amsterdam, the Netherlands, who provided a venue and helped assess the questionnaires. This project served as the inspiration for the olfactory events carried out throughout the Odeuropa Project.



Caption: Portrait Caro Verbeek by Myra May.

Who is Caro Verbeek?

As part of her PhD, Caro Verbeek was the curator and coordinator of the [*In Search of Scents Lost*](#) project at the Rijksmuseum in Amsterdam (2015-2019). Verbeek is currently the curator of Mondrian and De Stijl at the [Kunstmuseum Den Haag](#) (the Netherlands) and is an assistant professor at the [Vrije Universiteit Amsterdam](#), where she teaches her course [*Knowing by Sensing*](#). Additionally, she creates olfactory tours and interventions for museums. Some of Verbeek's projects include [*Can You Smell Abstraction?*](#) at the Kunstmuseum Den Haag (2021-present), and [*The Museum of Smells*](#) at the Stedelijk Museum Amsterdam (2018). Verbeek was also the co-curator of [*Odorama*](#) (2015-2021) which was a collection of presentations and talks focussed on sensory topics and accompanied by scents which took place at [Mediamatic](#), Amsterdam, the Netherlands.



Caption: Bernardo Flemming developing scents at the IFF lab. Photo courtesy of Caro Verbeek.

What advice would you give to GLAM professionals that want to use olfactory storytelling?

Caro Verbeek: “*You see more when you smell.* That has always been my adage. When you include smells in storytelling people won’t just learn about the smells of the past but it will also alter their gaze and they will see different details, pay more attention to the overall atmosphere, the materials, and the facial expressions.”



Caption: *The Battle of Waterloo*, Jan Willem Pieneman, 1824, oil on canvas, h 567cm × w 823cm × l 822.7cm. Free of Rights. Credit to the Rijksmuseum, Amsterdam, the Netherlands.

What kinds of scents were created for *In Search of Lost Scents*?

Caro Verbeek: We produced 12 scents to accompany specific artworks that are on view at the Rijksmuseum. The most popular scent was modelled after Jan Willem Pieneman’s painting of [The Battle of Waterloo](#) (1824). Its creation was historically informed but also based on visual cues of the painting like the weather conditions, horses, and gunpowder. The second most popular scent

accompanied the Rijksmuseum's [Beuning Room](#) (c.1745). Its creation was historically informed and was created to communicate contrasts and combinations of smells within the space. The smell included resins and spices which were burned in the fireplace to fight mildew as well as some of the scents from the streets that would have entered through the room's window.



Caption: Room from an Amsterdam canal house, anonymous, c. 1745 - c. 1748, mahogany (wood), h 460cm. Free of Rights. Credit to the Rijksmuseum, Amsterdam, the Netherlands.

The Heritage Scents of In Search of Lost Scents:

The Battle of Waterloo | [Eau de Cologne](#), gun powder, anxiety sweat, damp earth, horse, leather

The Beuning Room | Resins, mildew, fireplace, lime tree, horse, canal

****These scents were created by IFF in collaboration with the [Rijksmuseum](#) as part of In Search of Lost Scents.***

During the guided tours, how did different groups respond to the smells and the space?

Caro Verbeek: One of the goals of the project was to better understand what adding an olfactory dimension to storytelling actually does to different target groups, like adults, children, and people of other abilities. The tour guides I trained told me that those who are usually very quiet became very talkative and that children seemed to have a much longer attention span. They noticed that participants also spent much more time in front of each artwork.



Caption: Caro Verbeek giving an olfactory tour through the Rijksmuseum, Amsterdam. Photo courtesy of Caro Verbeek.

Visitor Reflections on *In Search of Lost Scents*:

Visitors found the exhibition engaging and that the scents featured in the exhibition expanded their understanding about the act of seeing itself. Seeing could also be made possible through stimulating other senses. Visually impaired participants found the use of *The Battle of Waterloo* scent particularly helpful when understanding the artwork:

“Your story was like an explosion of scents rousing my mind’s nose. When finally you made us smell it, I recognised it even though I hadn’t experienced it before. That made an impact.”

“Smelling and listening stimulated my creativity. The multi-sensory way of delivering a story resulted in a very sensational state of mind. I already realised I could ‘see’ through my sense of hearing. But after today I know I can also ‘see’ by my sense of smell.”

“What I remember most clearly of the tour is *The Battle of Waterloo*. Its size and complexity were illustrated by your footsteps, story and the scent.”



Caption: A visually impaired individual experiencing the scent of *The Battle of Waterloo* in front of the artwork during a scent tour. Photo credit Cathelijne Denekamp.

GLAM professionals also found the guided tours beneficial:

“To me the scent helped render the tour even more interactive (it stimulated interaction between me and the visitors, but also amongst themselves). Almost every visitor felt the urge to share what they perceived.”

Besides scent, what other modes of sensory engagement were used during the tour?

Caro Verbeek: When I conducted tours for the visually impaired, I brought items to touch like a pomander and a bottle of [Eau de Cologne](#). I also often used sounds to create a sense of space and dimension. For example, to indicate the size of Jan Willem Pieneman’s painting of [The Battle of Waterloo](#) (1824), I audibly walked its length on the floor. This way everyone knew what they were dealing with.

What was the biggest challenge of using olfactory storytelling and how did you solve it?

Caro Verbeek: I found the distribution method most challenging. One of the methods we used were blotters and I found it difficult to plan out how to prepare the blotters, hand them out, and then get rid of them again. We worked with sleeves and put 15 blotters in each sleeve, 15 minutes before the event. The tour guides were trained by me in order to do that. They carried a plastic bag so the blotters could be disposed of immediately.



Caption: Caro Verbeek giving an olfactory guided tour. Photo credit Cathelijne Denekamp.

How does engagement with smells contribute to worthwhile storytelling in GLAMs?

Caro Verbeek: There is much more engagement with the objects in the museum BUT also with each other! People are very interested in the different ways the scents are perceived in relation to the objects on display and share their experiences even with total strangers and feel connected to the past and other people simultaneously. Blind and low sighted people said it helped them imagine what was being displayed and depicted and it emphasised the characters involved in the stories. Overall the experience is more memorable.

Section 3: Olfactory Event Design

Introduction:

How do I ensure that the design of my olfactory event is suitable for the museum space, staff, and visitors? This section focuses on *how* to design an olfactory event based on the resources you have at hand. We describe different kinds of olfactory events and discuss why you should opt for one of these. Additionally, we outline various smell distribution and presentation techniques, with hands-on instructions on how to make use of them.¹

Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
What type of olfactory event is right for me?	What are the costs of an olfactory event?	How to present scents in heritage environments?	What are the pros and cons of smell distribution methods?	How to manage olfactory events?
Find out what an olfactory event is and what different forms these events can take. Inspirational examples are provided.	This chapter will help you better understand how an olfactory event may impact the resources (costs and time) of your institution.	Here you can find an overview of the different ways smells can be presented safely and efficiently in heritage environments.	This chapter provides more detailed information about smell distribution methods.	Find out how to safely and efficiently care, store, and prepare supplies of an olfactory event.

¹ This section was built on the previous research of Caro Verbeek and the project [In Search of Lost Scents at the Rijksmuseum Scents as a Medium in a Museum of Visual Art](#) carried out in 2020 and cumulative research done for the exhibition *Fleeting-Scents in Colour* at the Mauritshuis, Netherlands. Additionally, further research and implementation was carried out by the Odeuropa Project through their five olfactory events, *Working with Scents in Glams - Best Practices and Challenges* (2021), *Follow Your Nose! a guided tour with smells* (2022), *Workshop Malodours as Cultural Heritage?* (2021), *City Sniffers: a smell tour of Amsterdam's ecohistory* (2022), and *Workshop Improve Your Olfactory Language* (2022).

Chapter 1: What type of olfactory event fits your organisation?

Introduction - What is an olfactory event?

An 'olfactory event' can come in many forms. It can be a guided tour through a museum, a self-guided tour around and through a city or a heritage site, an exhibition or installation, a nose-on workshop, a smell training, or a smellwalk which all use smell as an integral and intentional medium of storytelling. Trailblazers within the field of olfactory events, such as Lizzie Ostrom, Mathilde Castel, Sissel Tolaas, Peter de Cupere and the Institute of Art and Olfaction's founder, Saskia Wilson-Brown (to name just a few), have been very creative in inventing ways to engage with the nose in heritage environments. They have used creative methods to distribute smells within various environments and have invited visitors to sniff fragrant objects or even entire museum walls. Thanks to the innovative designs of olfactory artists, and the fruitful collaborations between heritage institutes and scent designers, we now already have a wealth of examples for olfactory events to be inspired by (see the Database of the Past and Present Uses of Scent in GLAMs). In this chapter we break down the options by describing different kinds of olfactory events. Note that to retain a focus for this section, we do not include olfactory art installations within the scope of the section.

Olfactory Exhibition/Installation

An olfactory exhibition or installation is when (1) artworks, smells and information are presented simultaneously within a curated exhibition and/or (2) artworks with inherent olfactory properties and information are presented simultaneously within a curated exhibition. This event type is beneficial for GLAMs that wish to present a variety of objects and topics at one time and have a space to do so.

Spotlight 1: *Tate Sensorium*, The Tate Modern, London, United Kingdom, 2015

[Tate Sensorium](#) was an immersive display featuring four 20th-century British paintings from the Tate's museum collection. Visitors could experience sounds, smells, tastes and physical forms inspired by the artworks, and record and review their physiological responses through measurement devices. The experience encouraged a new approach to interpreting artworks, using technology to stimulate the senses, triggering both memory and imagination. Upon leaving, visitors were invited to explore the rest of the gallery using the theme of the senses as a guide.

Spotlight 2: *Fleeting - Scents in Colour*, Mauritshuis, The Hague, Netherlands, 2021



Caption: Visitors sniffing the dry air foot diffusers in front of Pieter de Grebber's *Adoration of the Magi* (1638) (left) and Pieter de Hooch's *Interior with Woman in Front of a Linen Cupboard* (1663) (right) at the *Fleeting Scents in Colour* exhibition. Photo credit to Sofia Collette Ehrich.

The exhibition [Fleeting - Scents in Colour](#) at the Mauritshuis showcased 17th century artworks from the perspective of smell. Through the use of foot-pump smell stations, visitors could experience specially designed and historically informed smells: clean linen cupboard, bleaching fields, ambergris, myrrh, 17th century canal and pomander.

Spotlight 3: The Sensorial Odyssey, the Natural History Museum, Paris, France, 2021



Caption: A visitor sniffing in the "Take Off with the Flamingos" room at the *Sensorial Odyssey* interactive exhibition. Photo credit to Sofia Collette Ehrich.

The [Sensorial Odyssey](#) at the Natural History Museum used large screens, impressive recorded visuals and ambient diffusion to immerse visitors in various natural environments. Eight different rooms with eight different multisensory environments showcased topics from the African Savannah to rainforest canopies.

Workshop or Lecture

An olfactory workshop, symposium or lecture is an event where the program is designed to include speaker presentations simultaneously with smells that are intentionally chosen for the topic of the presentation. Based on past examples, these events allowed the speaker to choose the smell based on a previously curated selection and there were no more than three smells per panel session / lecture. Smells were often distributed via blotters, or through an Aroma Jockey.

Spotlight 1: Odorama, Mediamatic, Amsterdam, The Netherlands, Ongoing from 2015



Caption: Aroma Jockey 'Scentman' Jorg Hempenius during the first Odorama edition and in action during a TedX talk by Inger Leemans. Photo courtesy of Jorg Hempenius.

Mediamatic, Amsterdam together with art historian Caro Verbeek and perfumer Frank Bloem created [Odorama](#), an evening of presentations and discussions together with an AromaJockey, who distributes smells to the audience. Odorama evenings included presentations about olfactory art, history, and design and actively engaged with all of the senses.

Spotlight 2: Odeuropa's Malodours as Cultural Heritage?, December 15th-16th 2021, Online



Caption: Christina Kotsopoulou using smelling beets as part of Odeuropa's "Do it Yourself" curriculum while listening to the Malodours as Cultural Heritage? Workshop. Photo courtesy of Christina Kotsopoulou.

The Odeuropa project in collaboration with the Berlin Center for Cold War Studies (BKKK), organised the workshop: [Malodours as Cultural Heritage?](#). The goal of the workshop was to explore and challenge the topic of stench from varying angles and provide methods and techniques using malodours as an important means of storytelling within heritage institutes. Due to Covid-19 restrictions, the workshop was held entirely online. Regardless of the online format, Odeuropa stayed faithful to its nose-on approach by developing a '[Do it Yourself' curriculum](#) for remote smelling in which online participants could follow before and while attending the workshop.

Olfactory Guided Tour

An olfactory guided tour is when artworks or other visuals, smells and information are presented simultaneously by way of a tour guide, who verbalises the information. Guided tours are beneficial for GLAMs that wish to create a unique and intimate experience for their visitors. Guided tours can highlight hidden visual elements in artworks within the GLAM collection or connect the surrounding city to the collection. Guided tours are also beneficial for those that want to have more control over the olfactory experience as they can be registered for in advance and group sizes can be decided in advance. Previous examples show that it is beneficial to offer tour guides with a variety of 10+ artwork/smell combinations in which the tour guide can choose a selective path based on their preference.

Spotlight 1: Olfactory Guided Tour - A History of Still Life from Prehistory to the Present Day, Louvre, Paris, France, 2022

The Louvre museum asked scent scenographer and founder of [Iris & Morphee](#), Carole Calvez to develop 8 scents and design an olfactory guided tour through their collection of still life paintings to accompany their temporary exhibition, [A History of Still Life from Prehistory to the Present Day](#). One of the aims of the event was to bring the Louvre's still life collection to life through scents. Visitors were able to discover olfactory atmospheres, objects, and details of religious paintings through their senses. With Calvez, a scent designer, as their guide participants also learned about the history of perfumery and the historical and cultural character of scents.

Olfactory Self-Guided Tour:

An olfactory self-guided tour is a tour when artworks or other visuals, smells and information are presented in a way that the participant can engage with limited intervention of personnel. Communication of content can be via an audio guide or smartphone application and depending on the desired effect, the tours can happen indoors or outdoors. These tours are beneficial for institutions who wish to engage their visitors with the collection through new outputs. Based on previous examples, these tours often offer a limited number of smells via a mobile presentation method (printed methods like rub and sniff or hand held methods like diffusers) place/smell combinations in which a set path can be taken.

Spotlight 1: Phantasmia, Los Angeles, California, United States

In collaboration with Ghost Hunters of Urban Los Angeles and The Smelly Vials Perfume Club, The Institute of Art and Olfaction, Los Angeles (IAO) organised a self-guided, olfactory driving tour called [Phantasmia](#). The tour explored the haunted history of Los Angeles, especially narratives that are specifically notable for their mention of scent. The IAO created thirteen scents presented in 3ml spray vials. The scents together with an informative map designed by Micah Hahn at Allies.la was put into a kit that participants could collect and interact with on their own time.

Spotlight 2: Odeuropa's City Sniffers: a tour of Amsterdam's ecohistory, Amsterdam, Netherlands, 2022



Caption: (left and right) Participants sniffing around Amsterdam during Odeuropa's *City Sniffers: a tour of Amsterdam's ecohistory* event. Photo credit Sofia Collette Ehrich.

Odeuropa's [City Sniffers: a tour of Amsterdam's ecohistory](#) (2022, Amsterdam, Netherlands) followed one path of six stops with smells and stories within the city. Using a free phone application and Rub and Sniff map to navigate, participants could walk around smelling and exploring stories connected to the past and present history of Amsterdam.

Olfactory (Smell) Training

Contemporary Western culture does not offer specific attention or vocabularies for the sense of smell, often provoking a lack of interest or legitimacy towards smell perception and description. Smell practice helps individuals pay more attention to smells and value their own capacity to engage with smells. Smell practices often include odorants, such as alcohol-diluted raw materials, both natural and synthetic, which are presented to the participants who will alternate between individual description using personal memories and sensory analogies (written down and preferably in silence) and collective sharing. Collective discussion brings the group to a select common olfactory descriptors.

Spotlight: AbScent Smell Training Resources

[AbScent](#), a charity organisation in the United Kingdom, proposes step by step instructions for a *do it yourself* [smell training](#) on its website. Although originally intended to recover from smell loss, the training is a great inspiration to cultivate your nose and train your sense of smell. Abscent recommends using amber jars, watercolour paper, and essential oils build an olfactory training kit. As a guide and to keep track of your progress, they created the [Snif App](#) which is easily accessible via your mobile phone. If applications are not easy for you to use, you can also use pen and paper while following their [guided questions](#).

Smellwalk

The smellwalk is a sensory method to investigate human perception of smells in any given environment. It is used to determine what a place smells like and can also be used to investigate the influences of smells on the people perceiving them: the smellwalkers. To date, the smellwalk method has primarily been used in fields of urban planning, art and design, history and ethnography. Notable academic contributors to the method include Victoria Henshaw, Kate McLean, Suzel Balez and Louisa Allen. During a smellwalk, participants focus on their sense of smell as the primary sense of knowing and report their sensory experience in the form of written and/or oral commentary. Smellwalks serve three purposes which are not mutually exclusive: research and collection of olfactory data; art and heritage mediation; raising awareness to the importance and relevance of the sense of smell.

Spotlight: Kate McLean's Smellwalk for the American Historical Association 136th Meeting, 2023

Philadelphia, United States

As part of the American Historical Association 136th meeting, Dr Kate McLean led the '[Smellwalk Philadelphia](#)' in which "participants [were] encouraged to use [their] own noses to detect, differentiate and describe the smells of the contemporary urban landscape and imagine historical parallel odours via three walking stages." The first stage started at Washington Square, continued to Independence Square and concluded at the Liberty Bell. The second stage went along Ranstead Street and to Benjamin Franklin's former home. The final stage followed Market Street east past local restaurants to end at The Franklin Fountain. Smellwalkers were encouraged to connect contemporary smellscapes with historical ones and report their olfactory impressions in a *smellnote* form.

Chapter 2: What are the costs of an olfactory event?

*Project plans to be integrated into the text but for easier reading, see [here](#).

Perhaps you are interested in coordinating an olfactory event, but you are unsure how this will impact your GLAM institution on a practical level. The truth is that olfactory events can come in different shapes, sizes and budget and they take careful planning. In this chapter, we describe three project options, estimating how much time, staff, and budget is involved.

Please note that these are approximations. Institution size, chosen scent designer, and number of scent creations will impact the project plan. For the budget estimations we only included costs directly related to the olfactory event.

Project #1: Olfactory Guided Tour with Blotters



Caption: A capture of materials in preparation for an olfactory guided tour at Museum Ulm, Germany. Photo credit to Sofia Collette Ehrich.

The information below provides a budget and timeline for the planning of one olfactory guided tour done inside the museum. The project estimates the creation of five heritage scents for an olfactory guided tour that lasts for three months.

Project #1	OLFACTORY GUIDED TOUR											
	Planning and Content Curation				Scent Development				Test Tours and Implementation			
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12
GLAM Institution	Decide on the "Scope" of the Guided Tour. Engage with all GLAM departments that will be impacted by the event.	Look through your (digital) collection for olfactory references. For tips, consult the resource Choosing Olfactory Narratives in your own Collection.	Decide on final scent - artwork choices with the input of the scent designer. Provide all necessary information to the scent designer by using the Heritage Scent Design Brief for every scent creation. Provide scent designer with the Heritage Scent Development Reports which they will need to fill out. Taking the scent designer on an in-person walk through of the GLAM space and artworks is a plus.			Order supplies					Train tour guides and conduct test tours	Launch the Event!
Scent Development by Scent Designer			Supports GLAM on scent - artwork choices, assures understanding of the scent development process with the GLAM team.		Scent Development (round 1)	Delivery of scents with complete Heritage Scent Development Reports. Organize a small evaluation panel using the worksheets. Guidelines for Heritage Scent Evolution		Scent revision and final delivery of scents				

Project Overview:

Production Months: 12

Total Smells: 5

Staff - 1-2 in house (GLAM professionals), 1 perfumer, 2+ tour guides

Total Working Hours: approx. 800 (each GLAM professional working 1 day/week for 1 year)

Smell Distribution: Blotters with Protective Glassine Sleeve

Other Supplies: sealable bags, permanent marker, gloves

Total Approximate Budget: €3,340

3 Single Ingredient Representations: €600

2 Custom Smell Compositions: €2,400

1000 Blotters with Protective Glassine Sleeves- €240

Other Supplies: €100

Project #2: Guided Tour with Rub and Sniff Card



Caption: The Odeuropa's *City Sniffers: a smell tour of Amsterdam's ecohistory* rub and sniff maps directly after printing by [Scent the Brand](#). Photo credit to Adam Tasi, owner of Scent the Brand.

This information is based on observations and coordination of the Odeuropa Project's guided tour with a rub and sniff card, *City Sniffers: a smell tour of Amsterdam's ecohistory* (2022). The project estimates the creation of five heritage scents for a guided tour that expects 5,000 participants.

Project #2	Rub and Sniff Tour														
	Planning and Content Creation					Scent Development					Rub and Sniff Printing				
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15
GLAM Instruction	Decide on the "scope" of the Guided Tour	Engage with all GLAM departments that will be reached by the event.	Look through your (digital) collection for olfactory references. For choosing Olfactory Narratives in your walk Collection.	Decide on final scent - artwork choices with the input of the scent designer. Provide all necessary information to the scent designer by using the Heritage Scent Design Brief for every scent creation. Provide scent designer with the Heritage Scent Development Report(s) which they will need to fill out. Taking the scent designer on an in-person walk through of the GLAM space and artworks is a plus.			Brief a graphic designer on the design of your Rub and Sniff card. Be sure to involve the Rub and Sniff Printer in the design process for optimal printing quality.			Deliver graphic design to Rub and Sniff Printer			Train tour guides and conduct test tours	Launch the Event!	
Scent Development by Scent Designer			Supports GLAM on scent - artwork choices; assures understanding of the scent development process with the GLAM team.		Scent Development (round 1)			Delivery of scents with complete Heritage Scent Development Report(s); Organise a small evaluation panel using the worksheet, Guidelines for Heritage Scent Evaluation		Scent revision and final delivery of scents to Rub and Sniff Printer					

Project Overview:

Production Months: 15

Total Smells: 5

Staff - 1-2 in house (GLAM Professionals), 1 perfumer, 1 graphic designer, 1 Rub and Sniff Printer, 3+ tour guides

Total Working GLAM Hours: approx. 800 (each GLAM professional working 1 day/week for 15 months)

Supplies: None

Total Approximate Budget: €20,000
3 Single Ingredient Representations: €600
2 Custom Smell Compositions: €2,400
Rub and Sniff Printing (5,000 cards): €16,000
Graphic Designer: €1,000

Would you like to conduct your own olfactory guided tour but do not know how to start? See **[Guideline How to Conduct Olfactory Guided Tours \(OST Resource 11\)](#)** for more detailed information and instructions.

Project #3: One Smell Card with Plastic Sleeve



Caption: The Odeuropa *Liberty Smells* scented card (front and back) which was created in collaboration with the American Historical Review and perfumer, Carole Calvez. Card printed by [Olfapac](#). Photo credit Sofia Collette Ehrich.

The information below provides a budget and timeline for the planning of one smell card with a plastic sleeve. The project estimates the creation of 500, 5.5 x 8.5 cm cards which can be used in various ways (inside the museum space, to sell in the museum shop, to accompany a printed journal article).

Project #3	Smell Card					
	Planning and Content Curation	Smell Development		Graphic Designer	Implementation	Implementation
	Month 1	Month 2	Month 3	Smell Printing	Month 5	Month 6
GLAM Institution	Look through your (digital) collection for olfactory references. For tips, consult the resource Choosing Olfactory Narratives in your own Collection.	Decide on final scent - artwork choices with the input of the scent designer; Provide all necessary information to the scent designer by using the <i>Heritage Scent Design Brief</i> for every scent creation; Provide scent designer with the <i>Heritage Scent Development Report(s)</i> which they will need to fill out. Taking the scent designer on an in-person walk through of the GLAM space and artworks is a plus.	Brief a graphic designer on the design of your smell card.		Preparation of the placement and use of the smell card	Disseminate smell cards
Scent Development by Scent Designer		Scent Development (round 1)	Delivery of scents with complete <i>Heritage Scent Development Report(s)</i> ; Organise a smell evaluation panel using the worksheet, <i>Guidelines for Heritage Scent Evaluation</i>	Scent revision and final delivery of concentrate to printer		

Project Overview:

Production Months: 5

Total Smells: 1

Staff - 1 in house (GLAM Professional), 1 perfumer, 1 graphic designer, 1 Printer

Total Working GLAM Hours: approx. 40 (each GLAM professional working 1 day/week for 5 months)

Supplies: None

Total Approximate Budget: approx. €2,800

1 Custom Smell Compositions: €1,200

Perfume Concentrate Costs: €250

Printing (500 cards): €350

Graphic Designer: €1000

Chapter 3: How to present (heritage) smells in GLAMs?

Now that you have decided the type of olfactory event that you want to organise, and have a basic understanding about the costs and time involved, we can now focus on the different smell distribution methods that you can employ for your event. Smells are fleeting and therefore difficult to control within time and space. This makes finding a presentation technique that meets every requirement challenging. Here we provide extensive information that will help you compare and contrast different presentation methods and choose the best solution for your situation.

Considerations before choosing a scent presentation method:

- **Decide on the project's goal:** What do you want to achieve with the olfactory event and why? For how long will the olfactory event last? Goals can be educational, immersive, etc.
- **Consider time and financial investment:** Think about how much time and money your institution can dedicate to training your team and carrying out the olfactory event. Members of the team must be appointed to the preparation and execution process of the event and supplies and scents must be paid for.
- **Evaluate your space:** Consider the affordances of the space within your heritage institution. For example: does the space allow the passing through of diverse groups (visually impaired, hearing impaired, all ages, wheelchair accessible)? What types of displays fit the space? Are scents allowed to "spill" from one room to the other?
- **Consider your target audience and number of participants:** Is it local communities or tourists, children, teenagers or adults, etc.? How many participants does the institution wish to draw to the olfactory event? How many visitors does it wish to accommodate throughout the event's duration?

Overall considerations for delivering olfactory stories:

- Think about the order of presenting scents: When using malodours and fragrances together, it is best to balance their use. Too many malodours at once can risk overwhelming the visitor. We recommend never to finish an olfactory event with a malodour.
- Time olfactory interventions strategically: Using scent as a tool of visitor engagement offers new and exciting opportunities for engaging with the museum space! However, interaction with scents can risk distracting the visitor from the verbal or written contextual information. Make sure that you plan how the scent will play a role throughout the event.
- Limit the number of scent interventions: Smelling can be exhausting for visitors. Make sure to limit the number of scent interventions to prevent nose fatigue. We recommend using no more than 8 scents for an olfactory event.

Overview of Types of Diffusion:

Based on informed research and the creation of our olfactory events, the following distribution methods as presentation techniques of smells in GLAMs. These methods will be outlined and described below.

- (1) **Environmental Diffusion**
 - (a) Scent Machine
 - (b) Aroma Jockey
- (2) **Mobile Diffusion**

- (a) Hand fan
- (b) Handheld Dry Diffusers
- (c) Blotter
- (d) Blotter Kit
- (e) Rub and Sniff

(3) Fixed Scent Stations

- (a) Scent Column
- (b) Affixed (Glass) Container with Hand Pump System

Environmental Diffusion

Environmental diffusion means that smells are (semi)-automatically diffused into a room the physical space. This can be done using scent machines specifically designed for this purpose. When disbursing more than one smell, one needs to pay more attention with environmental diffusion as clearing out the smell from the space between different scent diffusions takes careful coordination.

Scent Machine



Caption: The [Multiscent DMX Scent Machine](#) sold by AromaPrime. Photo courtesy of AromaPrime.

Description:

The environmental diffusion of smells can be distributed into the air via a small *scent machine* that is usually hidden from plain sight. The scent machine lets out scented material periodically so the space has a perceivable smell upon entering.

Implementation:

It is important that the museum staff and visitors are informed when ambient diffusion is used. Since the smell material fills the air, proper signage and warnings should be indicated so visitors are prepared and aware of the situation they are entering. Implementation of this technique must follow health and safety requirements.

AromaJockey



Caption: AromaJockey, Scentman distributing scents at the opening of *Mondrian Moves*, Kunstmuseum Den Haag, 2022. Photo credit Sofia Collette Ehrich.

Description:

Another form of ambient diffusion is via an AromaJockey. Suggested for lectures and pop-up events, an AromaJockey diffuses smells from a designated space with the use of electric fans. Due to the release of odour droplets during the use of this method, it is not recommended for spaces which hold artefacts or other sensitive environments.

Implementation:

The use of an AromaJockey is beneficial to symposiums, lectures, and exhibition openings. They can disburse relevant smells during a lecture or other live experience. Theatricality can be increased by the use of dry ice. Since the smell material fills the air, and the audience in the first rows will receive a higher impact of the scents, proper signage and warnings could be indicated on the event program so visitors are prepared and aware of the situation upon entering.

Mobile Distribution Methods

Local distribution means that participants or event guide are given something to hold, carry and smell in their hands. These methods are prepared in advance by the act of dipping, spraying, or printing.

Hand Fans



Caption: Odeuropa team member, Sofia Collette Ehrich preparing a hand fan for an olfactory guided tour at Museum Ulm in Germany. Photo credit Victoria-Anne Michel.

Description:

A hand fan, or handheld fan, is a broad surface (of paper or fabric) that can be folded and unfolded. When sprayed beforehand with scent, it can be waived, emitting only dry air. Since it does not require close contact between persons or the exchange of items, the method is hygienic. The method requires intervention from someone who waives the scented fans and explains their purpose.

Implementation:

The hand fan method works well for olfactory guided tours. Depending on the size of the group, when employing the hand fan technique for guided tours, you can prepare 1-2 fans per scent. We observed that participant interest was increased when the second fan was given to a participant to engage with the group along with the tour guide. The fans can be kept in thick plastic bags, labelled by scent and artwork. The method is efficient for larger and spontaneous groups as it does not require any preparation beforehand.

Blotters



Caption: (left) Blotters in hand after a scent evaluation. Photo credit Sofia Collette Ehrich.

Caption: (right) Odeuropa team members, Victoria-Anne Michel and Lizzie Marx dipping blotters in preparation for olfactory guided tours conducted at Museum Ulm, Germany.. Photo credit Sofia Collette Ehrich.

Description:

Blotters are acid-free, strong paper sticks on which a fragrance can be applied or dipped into. Blotters come in different forms, for example wide at the top with a pointed tip. The method requires intervention from someone to hand out the blotters and explain their purpose.

Implementation:

Blotters are used for various types of events where it is possible to hand out objects: indoor or outdoor guided tours, smell trainings and workshops, conference presentations, etc. They are most efficient when the number of participants is known beforehand so proper preparation can be done. To ensure safe handling and better scent containment, we recommend that blotters are used together with a cover. The glassine bag method (seen above) works well, but a small zipper bag to carry blotters is also efficient (see below).



Caption: Caro Verbeek with a carrier bag of blotters during an Odeuropa guided tour training. Photo credit Sofia Collette Ehrich.

Handheld Dry Diffuser:



Caption: Handheld dry diffusers used as press kits for the Follow Your Nose! A guided tour with smell event in collaboration with Museum Ulm and IFF. Photo credit Sofia Collette Ehrich.



Caption: Handheld dry diffusers used as press kits and [take home virtual tour](#) for Fleeting - Scents in colour, an exhibition curated by Ariane van Suchtelen at the Mauritshuis in the Hague, Netherlands and created in collaboration with IFF. Photo credit Sofia Collette Ehrich.

Description:

One example of the handheld dry diffuser technique are small cylindrical containers from which scent can be dry diffused. Before use, a few drops of pure, perfume (or essential) oil is applied to the absorbent sponge inside the container. When used, a puff of dry air comes out via unlocking the container and pushing the top up and down. They are easy to use and can be easily transported and carried as they are lightweight and do not contain any liquid. Three drops (.15ml) of perfume oil is enough to be used over 10,000 times. Perfume oil can be reapplied when the smell intensity starts to fade. The method requires intervention from someone to hand out the containers and explain their purpose.

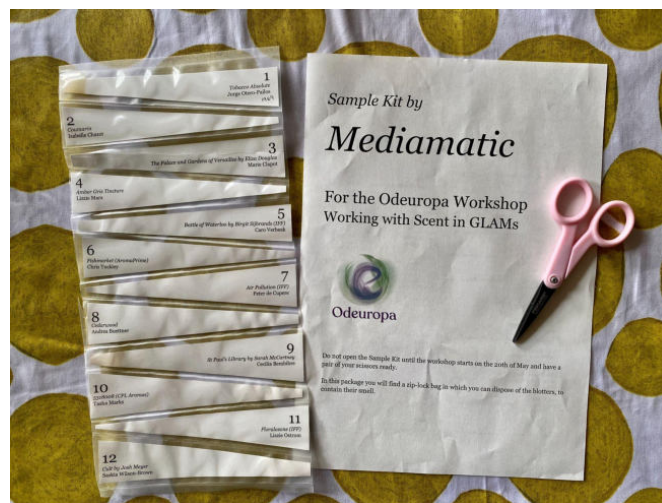
Implementation:

Handheld dry diffusers can be used in different ways. One of those ways is in the place of when a blotter would be used. Handheld dry diffusers were particularly efficient for olfactory guided tours where a tour guide could hand out a diffuser in front of each artwork and instruct participants on how to smell. Tour guides found this technique efficient as it can be prepared for up to one month in advance, reused many times and adapted for different group sizes.



Caption: Lizzie Marx using a handheld dry diffuser in front of an artwork at the Museum Ulm in Germany. Photo credit to Sofia Collette Ehrich

Blotter Smell Kit



Caption: The smell kit for the Odeuropa Project's workshop, [Working with scent in GLAMs - Best Practices and Challenges](#) designed and created by Mediamatic team members. Photo credit to Sofia Collette Ehrich.

Description:

A blotter smell kit is a handmade kit created with blotters and a vacuum sealer machine. Three to six

scents can be sealed into the vacuum sealed package which can be easily disseminated or mailed to a group and opened at the proper moment.

Implementation:

A blotter smell kit can be used for olfactory events that have a limited number of participants (less than 15) and are a suitable solution for virtual olfactory events where the smells have to be mailed. Low budget smell kits like these can be created with minimal supplies: blotters, alcohol diluted scent, a pen and a vacuum sealer. For efficiency, we recommend this method for a minimum of 3 and a maximum of 6 smells. To ensure proper use, blotters should be labelled properly with the name of the smell and the subject it is connected to.

Rub and Sniff (also known as Scratch and Sniff):



Caption: Rub and Sniff Map created for Odeuropa's *City Sniffers: a smell tour of Amsterdam's ecohistory* held next to the City Sniffers application which was created by Odeuropa researchers. Photo credit to Vania Lopez.

Description:

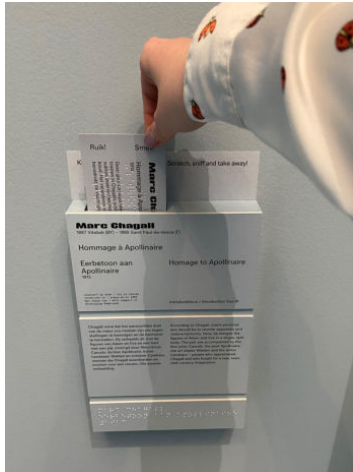
Rub and sniff, also known as scratch and sniff technology, was invented by 3M in 1965. It is achieved through the process of microencapsulation which is when perfume drops are enclosed at a microscopically small level and little "walls" go around the drops that well preserve the scent. One microencapsulated spot contains millions of these small microscopic scent capsules and when these scent spots are rubbed with the participant's finger, the walls break and the scent is "freed." This is how scent is perceived..

Implementation:

Rub and Sniff cards can be used in various ways: as an advertisement, a companion to a journal publication, a historical smell map etc. Cards transport easily, can be shared, mailed and smelled more

than once over longer periods of time. Information for the smells and artworks may be communicated via a QR code or written directly on the card itself.

Examples of Rub and Sniff cards:



Caption: Rub and Sniff card printed with Braille created for the Van Abbe Museum’s multisensory exhibition, [Delinking and Relinking](#) on display from 2021-2025. Photo credit to Sofia Collette Ehrlich.

AHR HISTORY LAB
American Historical Review 127.2 (2022), <https://doi.org/10.1093/ahr/hfac150>

Making Whiffstory

A Contemporary Re-creation of an Early Modern Scent for Perfumed Gloves

Lizzie Marx University of Cambridge, Sofia Collette Ehrlich KNAW, Inger Leemans KNAW, Cecilia Bumbibre University College London, William Tullett Anglia Ruskin University, Odeuropa, IFF, and Museum Ulm

This publication is in two parts: the scent contained on this card, which was developed to accompany the portrait of Helena Schermer (see reverse) in the Museum Ulm collections, and an explanation of the methodology by which it was developed.

For the latter, please see the print or online version of this journal.

This research has been supported by the European Union's Horizon 2020 program project Odeuropa under grant agreement number 10101469.

Scratch 'n' Sniff

Andreas Schuch, *Portrait of Helena Schermer*, 1630, oil on canvas, 100 x 82 cm, Museum Ulm, Ulm

Caption: Odeuropa’s [Making Whiffstory Rub and Sniff publication](#) (back and front) created in collaboration with IFF and the American Historical Review Journal.



Caption: Scented advertising flyers of rose and rosemary created for the *Follow Your Nose! A guided tour with smells*, an event created by the Odeuropa Project in collaboration with Museum Ulm, Germany. Photo credit to Sofia Collette Ehrich.

Fixed Scent Stations

Scent stations are fixed structures built for the purpose of an olfactory event or exhibition within a GLAM institution space. To prevent potential damage to the GLAM's collection, these stations are often created from methods of dry diffusion. Dry diffusion means that a container with a small amount of olfactory material can be used together with a pump to release into space with minimal impact.

Scent stations can be built to consider different functions and situations. For example, the stations can be situated at a height suitable for children, adults and wheelchair accessible. Additionally, by switching a hand pump for a foot pump, stations can be more hygienic in situations where contact illness is a worry.

Scent stations can come in different designs. We provide two examples below.

The Scent Column



Caption: The Scent Column used as a pop-up smell station at the Amsterdam Museum for the Odeuropa event, Odeuropa's *City Sniffers: a smell tour of Amsterdam's ecohistory*. Photo credit to Sofia Collette Ehrich.

Description:

A "Scent Column" is a standing structure that has multiple sniff spots. The column has a drawer in which you place the scented material. When the hand pump is squeezed, it disburses dry, scented air.

Implementation:

Scent columns are presented inside the GLAM institution. GLAMs can choose to present one or more and they can be staged in different parts of the space. Information about the smell can be communicated either on the structure itself or via a text on the wall.

Affixed (Glass) Container with Hand Pump System:



Caption: Liam R. Findlay sniffing a smell station made from a glass beaker and hand pump used for the exhibition 'Mondrian Moves' and designed by Berend Visser at the Kunstmuseum Den Haag (The Hague) in the Netherlands. Photo credit to Sofia Collette Ehrich.


Description:


This smell station consists of a (glass) container with a small amount of olfactory material at the bottom of the bottle which will aromatize the air in the rest of the container. When the hand pump is squeezed, it releases scented air directly to the nose.

Implementation:


GLAM institutions can affix the containers to platforms within an exhibition space to keep them stationary and available for use. Information about the smell must be communicated either on the structure itself or via another description (audio or visual).

Chapter 4: Pros and Cons of Smell Distribution Methods


Ambient Diffusion Method	Pros:	Cons:
 <p data-bbox="331 864 587 913">Caption: An Aroma Block by AromaPrime.</p>	<ul data-bbox="683 636 938 1003" style="list-style-type: none"> • The machines can be hidden for effect. • It creates a smellscape or atmosphere. • Requires little interaction or intervention from the user and museum staff. • It can involve groups of all sizes. • Creates an immersive environment. 	<ul data-bbox="1002 636 1257 1344" style="list-style-type: none"> • Because it releases odour droplets into the air, the method poses a higher risk to the artworks. • Since the smells are in the air, allergy and potential visitor annoyance is more likely. • More difficult to control within the space requiring more testing for frequency and intensity of the smell release. • Since machines create heat and light, they have to be checked as a potential fire hazard. • When used for longer periods, machines require refills.

Hand Fan Method	Pros:	Cons:
 <p data-bbox="331 1686 627 1736">Caption: Hand fan with bottle of scent.</p>	<ul data-bbox="683 1458 938 1731" style="list-style-type: none"> • This dry diffusion method is safe for the GLAM collection. • Due to their easy preparation and easy impact on a large number of people (8+), it works well for spontaneous events 	<ul data-bbox="1002 1458 1257 1731" style="list-style-type: none"> • Fans must be reapplied with scent every day that they are used for an event. • This method does not allow for an individual and controlled smelling experience, increasing the probability of

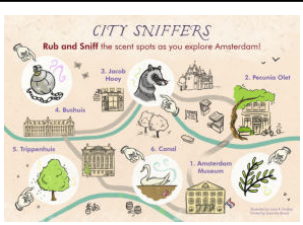
	<p>when participant numbers are unknown.</p> <ul style="list-style-type: none"> • The fan spreads the smell evenly and directly to the area in which it is directed and dissipates quickly when no longer in use. • The method is reusable • Encourages communal smelling, curiosity and conversation. <p>Participants often lean into the fan's trail and try to figure out the smell together.</p>	<p>participants being overwhelmed.</p> <ul style="list-style-type: none"> • Depending on the hand fan, they can be flimsy and easily breakable.
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Blotter Method	Pros:	Cons:
 <p>Caption: Blotter strip with glassine bag.</p>	<ul style="list-style-type: none"> • This dry diffusion method is safe for the GLAM collection. • The method offers a controlled and individual experience for the user as they are able to choose the pace and amount of time that the smell is in front of their nose. • Blotters are inexpensive to purchase and participants of the event can take the blotters with them as a keepsake. • Blotters can be used for large group events (workshops/conference 	<ul style="list-style-type: none"> • Carrying blotters can be cumbersome and awkward for the user(s). • Blotters need to be collected after use. • Blotters fill the room with scent more than other methods. • Preparing and dispensing blotters is time consuming. • There is a higher danger of scent cross contamination. • Requires storage space.

	<p>s/symposiums) or smaller groups (guided tours/olfactory trainings)</p> <ul style="list-style-type: none"> • Blotters capture a well rounded experience of the scent. Participants can experience the evolution of the scent (top, middle, base notes) 	
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Blotter Smell Kit	Pros:	Cons:
 <p>Caption: Vacuum sealed blotter kit.</p>	<ul style="list-style-type: none"> • This dry diffusion method is safe for the GLAM collection. • The method offers a controlled and individual experience for the user as they are able to choose the pace and amount of time that the smell is in front of their nose. • These supplies are easy to find and inexpensive to purchase. • Easy and straightforward to use • Kits can prepared up to 10 days in advance 	<ul style="list-style-type: none"> • Hand coordination is necessary. • Material use is higher and not reusable making this method less sustainable than others. • Production of the kits is cumbersome and time consuming. • Exact number of necessary kits must be known in advance.

Rub and Sniff	Pros:	Cons:
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Caption: Rub and Sniff map.

- Microencapsulation is safe for the GLAM collection.
- The method offers a controlled and individual experience for the user as they are able to choose the pace and amount of time that the smell is in front of their nose.
- Production of the cards are outsourced causing less stress for the GLAM institution.
- Allows flexibility in olfactory event design and storytelling.
- Offers participants a keepsake from the experience.
- The microencapsulation technique ensures a long lasting smell experience. It preserves the aroma on the paper for six months or more.

- Rub and sniff printing is costly.
- Due to the process of microencapsulation, the smell becomes slightly less vibrant than with other methods.
- Hand coordination is necessary.
- Brief instruction is necessary before using.

Handheld Dry Diffuser



Caption: Three handheld dry diffusers.


Pros:

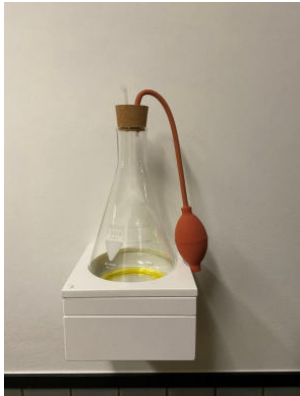
- This dry diffusion method is safe for the GLAM collection.
- The method offers a controlled and individual experience for the user as they are able to choose the pace and amount of time

Cons:

- Since the scent material has time to sit in the container, the smell becomes slightly less vibrant than other methods.
- Carrying the diffusers can be cumbersome and awkward for the user.

	<p>that the smell is in front of their nose.</p> <ul style="list-style-type: none"> • With the first application of perfume oil, the handheld dry diffuser technique can hold scent for months and can be reapplied as needed. • Can be disinfected, cleaned and reused for multiple events. • Can be prepared in advance requiring little preparation time for the user just before the event. 	<ul style="list-style-type: none"> • To avoid misuse, there must be a system to differentiate between diffusers of different smells (a label, sticker, colour coding of containers). • Brief instruction is necessary before using. • Initial preparation of this method is time consuming.
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The Scent Column	Pros:	Cons:
 <p>Caption: The Scent Column.</p>	<ul style="list-style-type: none"> • This dry diffusion method is safe for the GLAM collection. • Little preparation time necessary. • Long lasting smell and does not need replacing often. • The scent column can be decorated, adorned, and painted for visual effect. • The hand pump allows for the user to control their own smell experience. • A proper height for children, adults, and wheelchairs. 	<ul style="list-style-type: none"> • Requires hand contact raising hygiene concerns. • More costly than other methods. • Adequate space is necessary for the station to stand.

(Glass) Container with Hand Pump System	Pros:	Cons:
 <p data-bbox="331 958 579 1032">Caption: Affixed (Glass) Container with Hand Pump System.</p>	<ul data-bbox="683 555 943 1482" style="list-style-type: none"> • This dry diffusion method is safe for the GLAM collection. • Little preparation time necessary. • Long lasting smell and does not need replacing often. • Simple design and easy to use. • The hand pump allows for the user to control their own smell experience. • The design of the bottle can differ upon request. • Since the container is small, it can be integrated into the design of the exhibition easily. • Scented material only releases upon interaction with the user decreasing the risk of the smell filling the space and the need to replace scented material. • Inexpensive to produce. 	<ul data-bbox="1002 555 1262 922" style="list-style-type: none"> • Requires hand contact raising hygiene concerns. • If the container is made of glass and can break if mishandled. • The container must be affixed to something to prevent misuse. • Cleaning and refilling the container is cumbersome.

Chapter 5: How to manage olfactory events?



Caption: Museum Ulm, Germany's curator, Dr. Eva Leistenschneider and Odeuropa team members, Victoria-Anne Michel and Dr. Lizzie Marx preparing blotters for *Follow Your Nose* test tours. Photo credit Sofia Collette Ehrich.

Olfactory events take extra care and management. Since olfactory materials (ex. perfume, essential oils) are made of organic matter, they can be potentially hazardous and subject to degradation. Degradation especially happens to these materials when they are stored for long periods of time in harsh conditions (bright light and high temperatures). It is important to take preventative measures when storing and using scented materials as misuse can cause quicker decline and affect the quality of the smell. The three principal threats to olfactory materials are light, heat, and oxygen.

Here we offer tips for caring, storing, and preparing supplies of an olfactory event.

Caring for your Scented Materials:

- Store olfactory materials (diluted smells, essential oils, perfume oils) in a cool, dry, dark space, ideally in a fridge for optimal temperature control.
- Olfactory paper matter (ex. rub and sniff cards) and handheld dry diffusers should also be stored in a cool, dry, dark space to keep them in good condition.
- To prevent smell from "leaking" into the GLAM space, supplies should be stored in airtight containers ideally away from public and working spaces.
- When storing olfactory materials, especially essential oils, opt for those that have child-resistant closures for optimal protection.
- Make sure all olfactory materials are properly labelled for their contents and can be properly closed with a screw on top.
- For further protection from light exposure, store olfactory materials in a dark place and in dark brown bottles.

Tips on Properly and Safely Preparing Supplies Olfactory Events:

- To prevent an adverse skin reaction, essential oils and diluted scents should have little to no direct contact with your skin. Gloves should always be used for both hands when handling and preparing supplies for an olfactory event (dipping blotters, preparing handheld dry diffusers, etc).

- To prevent cross contamination, olfactory event supplies must never be used more than once or for different scents. This includes the use of blotters, pipettes, handheld dry diffusers, gloves, and hand fans.
- When planning an olfactory event, the fresher the olfactory material the better. For example, blotters should not be prepared more than two hours in advance.
- Prepare olfactory event materials (ex. dipping blotters) away from the GLAM spaces and artworks. Find a preparation area with optimal air ventilation.

Use of Olfactory Materials:

- When using olfactory materials, always return and close the bottle caps directly after use to avoid spills and evaporation.
- We recommend that GLAM areas and workspaces that hold smells have proper signage for those with olfactory sensitivities.
- For presentation methods where olfactory material can be reapplied (ex. handheld dry diffusers, fixed smell stations), we recommend reapplication every four to five weeks to ensure scent quality.
- Tote bags, baskets, and zipper plastic bags can be used to carry supplies (handheld dry diffusers, blotters, hand fans) throughout an olfactory event.
- If stored properly (but depending on the frequency of use), olfactory materials like essential oils and alcohol diluted scents should be replaced every 12 months to ensure optimal quality and use. It is best to mark the bottle with the date of when you first opened it to ensure timely replacement. Note: the more air (or space) present in the storage bottle, the more quickly oxidation occurs

CASE STUDY #5
Inspiration for Presenting and Distributing Scents in Heritage Spaces

Jorg Hempenius, Scent Expert and Founder of [iScent](http://www.iscent.nl), the Netherlands.

Website:

<https://www.iscent.nl/over-iscent/>

<http://www.museumbeleving.nl/>

A big challenge of olfactory storytelling is finding the best way to present and distribute scents safely and efficiently within heritage environments. Scent expert, Jorg Hempenius has been solving these challenges for more than a decade and has come up with many creative methods of presentation.



Caption: Jorg Hempenius performing as an Aromajockey. Photo credit Sofia Collette Ehrich.

Who is Jorg Hempenius?

Jorg Hempenius is the founder of [iScent](http://www.iscent.nl). He is a scent expert based in the Netherlands who has been working in the fragrance industry for twelve years. Hempenius creates custom fragrances and explores the practical dissemination and distribution of such scents in a wider physical curatorial context. You can learn more about Jorg's work with heritage institutes on his website [Museum Beleving](http://www.museumbeleving.nl) (Dutch).

What types of smell distribution methods has iScent offered heritage institutions in the past?

Hempenius uses two main methods of diffusion which are passive diffusion meaning via a spray or machine and active diffusion meaning that people have to interact in some way. This is usually via a nested box or a hand or a foot pump. In his experience, most heritage institutes prefer when the odorant liquid is placed in a vessel and scented air is activated via hand or foot pump. Heritage institutes tend to be more wary of diffusion that involves machines because they are more difficult to control.

According to Hempenius, passive and active diffusion offer similar scent experiences, but he emphasises that he always considers the preference of the heritage professionals. It is important that they are comfortable with the experience and the diffusion can always be reassessed and adapted to their needs.

Jorg Hempenius offers the following personal experiences of using various presentation methods of scents in heritage spaces:

#1. Pump with a rubber bulb method (active diffusion)

Jorg Hempenius: "The pump with a rubber bulb method can be described as when a liquid fragrance is placed in a hollow space - such as a bottle - and gets a puff of air via a (hand) pump. The pump method transports scented air to the participant upon engagement."



Caption: A visitor sniffing a scent at the [Mondrian Moves exhibition](#) at the [Kunstmuseum Den Haag](#) in the Netherlands (2022) using the pump with a rubber bulb method. Photo credit Sofia Collette Ehrich.

You can see the 'pump with a rubber bulb' method in action above.

#2. box with double bottom (active diffusion)

Jorg Hempenius: "This method places scented material inside a box that is nested inside something else like a wall, chest, plastic fixture. The scents can be safely experienced by approaching the fixture and sniffing via strategically placed holes. This is commonly used in fixed exhibition spaces."

#3. Cartridges in hollow inside spaces with an air fan (passive diffusion)

Jorg Hempenius: "Scents can also be diffused ambiently making the scent experience more *passive*. Scents can be stored in any hollow space, and when air flows through this space supported by the ventilator, it will carry the smell molecules into the room through the air flow. This is how smell (in whatever quantity) may be distributed, depending on the power of the ventilator. In turn, this ventilator can be triggered by differing sensors. I always advise on the best balance between material quantity and the ventilator's air flow power to stay within the institution's limitations and still achieve their goals."

#4. Scented paper cards (active diffusion)

Jorg Hempenius: "Scented paper cards are a durable and cheaper alternative to scratch and sniff cards. They absorb scent well and are easy to sniff without much interaction. A downside is that their scent tends to 'leak' more into the space so they should be packaged and stored in airtight containers when not in use."



Caption: Odeuropa trainee, Christina Kotsopoulou sniffing a scented card at the [Delinking and Relinking](#) multisensory exhibition at the [Van Abbe Museum](#) in Eindhoven, the Netherlands.

You can see the scented paper cards method in action above, where a visitor sniffs the scented card. The method was applauded by staff and museum visitors for its ease of application and long lasting smell intensity.

How do you choose a scent distribution method when using malodours in heritage institutions?

When using malodours, extra precautions are considered and it is best to use a method that allows the visitor to determine their own dosage of the scent. In this case, the pump with a rubber bulb method allows visitors control over their scent intake while still having an impactful experience. Hempenius also emphasises that a more contained method does not make the whole space smell bad, which is essential to keep in mind.

As someone who both creates scents and the design methods for their presentation, how do you ensure the safety of the heritage institution's staff and visitors?

It is crucial to keep to [IFRA Standards](#) and use high quality materials, which is especially important when scents are used in open spaces (ambient diffusion). He says that it is important to consider that allergens are everywhere - in natural or synthetic fragrance compositions - so when they are spread through space there is always the possibility of an allergic reaction or for annoyance to occur. However, Hempenius emphasises that in his experience, this has hardly ever happened. If costs and smell annoyance are a concern, it is best to follow modes of active diffusion.

Jorg Hempenius' advice for starting your own olfactory events:

#1. "Understand the story: dive deep into the narrative that the cultural organisation wants to tell and identify its most important themes and emotions. This helps when deciding on specific scents which help emphasise the wider narrative."

#2. "Dare to experiment with scent in spaces: individual artworks can benefit from a deepening of the experience through scent and the space itself can also enhance a specific ambiance by incorporating scent so all the featured artworks have more of an impact together."

#3. "Test and evaluate: run tests to analyse how visitors respond to the smells and gather feedback. If necessary, alter the scent experience to reach the desired impact. Understand that because curation with scent is always an experiment, you may not achieve 100% safety all of the time. It is good to understand your audience and adapt."

CASE STUDY #6

Follow Your Nose! A guided tour with smells at Museum Ulm, Germany

[Lizzie Marx](#), Odeuropa Researcher and Curator of Dutch and Flemish art, [National Gallery of Ireland](#), Dublin, Ireland.

Website: <https://www.codart.nl/guide/curators/lizzie-marx/>

Guided tours are an important interactive and multisensory mode of engagement for heritage institutes. Tour guides can curate new and exciting paths through their collection and verbalise fresh and uncommon narratives to their participants. Within the Odeuropa project, we created an olfactory guided tour in collaboration with [Museum Ulm](#) in Germany and [IFF](#) called [Follow Your Nose! A guided tour with smells](#) (2022-present) which included [eight artworks](#) and eleven scents. Curator and researcher Lizzie Marx says an olfactory tour showcases “a story that has depth. The most impact or depth is created when the olfactory has a significant connection to the object or artwork on display.” You can read more about the creation and development of *Follow Your Nose!* on the Odeuropa website [here](#) and [here](#).

This is an interview with [Lizzie Marx](#), one of the curators of the event, [Follow Your Nose!](#) which itself was part of the research that contributed to the creation of Odeuropa’s *Olfactory Storytelling Toolkit: a “how-to” Guide to Working with Smell in Museums and Heritage Institutions*. A big thank you goes to Dr Eva Leistenschneider, Dr Stefanie Dathe, and the entire Museum Ulm staff for the knowledge, dedication and creativity that they put into this project.



Caption: Photo credit Chris O'Toole, National Gallery of Ireland, Dublin, Ireland.



Who is Lizzie Marx?

[Lizzie Marx](#) is the curator of Dutch and Flemish art at [National Gallery of Ireland](#) in Dublin, Ireland. She received her doctorate at the University of Cambridge with her thesis titled [Visualising, Perceiving, and Interpreting Smell in Seventeenth-Century Dutch Art](#). Marx has worked on several olfactory storytelling projects, including [Fleeting - Scents in Colour](#) at Mauritshuis in The Hague, the Netherlands. As a member of the [Odeuropa project](#), Marx worked on using AI to source historic imagery related to smell and incorporating olfactory storytelling into museum and heritage initiatives.

What was the aim of the use of olfactory storytelling for the *Follow Your Nose!* tours?

Lizzie Marx: [Follow Your Nose!](#) was co-created by the Odeuropa team, [Museum Ulm](#) and [IFF](#). It was in fulfilment with Odeuropa's "Impact" Work Package which focused on communicating and disseminating the project's outputs and methods through sensory storytelling in GLAMs. Using the research that Odeuropa had carried out, it was possible to identify works in Museum Ulm's collection that also spoke to Europe's olfactory history. For instance, by using computer vision to source works of art that depicted scented gloves. This informed the decision to include the portrait of Helena Schermer where she holds her perfumed gloves as part of the olfactory tour in Ulm.



Caption: Andreas Schuch, *Portrait of Helena Schermer*, c.1620, Oil on canvas. Image courtesy of Museum Ulm, Germany.

Another main aim of this event was to use it as an opportunity to collect data and measure the impact and value of olfactory storytelling in GLAMs. These questionnaires informed the relevance of sensory experience in heritage initiatives and contributed towards the preparation of *Olfactory Storytelling Toolkit: a "how-to" Guide to Working with Smell in Museums and Heritage Institutions*.

How and why did you choose the artworks that were interpreted into olfactory storytelling for *Follow Your Nose!*?

Lizzie Marx: We were very selective with the artworks and focussed on choosing olfactory storylines that were closely connected to them. For instance, some scents evoked the odours represented in the artwork, such as the [pomander](#) of Eitel Besserer. Others evoked imagined olfactory atmospheres, such as the Smell of Hell in Martin Schaffner's *Christ in Limbo*. There was also an opportunity to explore synaesthesia and the olfactory associations of the colours orange and blue in Ellsworth Kelly's titular painting, *Orange Blue* (1964–1965).

What advice would you give to GLAM professionals who want to use olfactory storytelling?

Lizzie Marx: It begins with a compelling story. It requires time, and research, but with great rewards. Take, for instance, the stop on the olfactory tour that discussed the *Portrait of Eitel Besserer*.



Caption: Martin Schaffner, *Portrait of Eitel Besserer*, 1516, Mixed techniques on panel. Image courtesy of Museum Ulm, Germany.

He is portrayed holding a rosary with a pomander, a scented pendant that was believed to protect from illnesses. The inclusion of this painting in the exhibition required research into what sort of ingredients might have comprised a 16th century pomander through researching historic medical treatises. Breaking down the pomander's recipe into its individual components generated stories about each ingredient, such as the importation of [nutmeg](#) to Europe, or the origins of the [animal-produced ingredient ambergris](#). The unique incorporation of the pomander in the rosary, which Besserer holds, also opened up new avenues of storytelling. For example, the multisensory approach to prayer in the Early Modern period (15th until the 18th century). In the case of the

portrait, the story is compelling because the olfactory is integral to the understanding and interpretation of the painting.

What was the biggest challenge of the scent development process and how did you 'evaluate' if the heritage scents suited their function?

Lizzie Marx: One of the biggest challenges, but also the most interesting insights into the process, was learning about the terminologies used in the perfume industry. For instance, the scent of leather in perfumery is not akin to [historical tanned leather](#). It is a scent category used by perfumers, defined by smoky, bitter notes, which can be misleading from a historical perspective. It required all of the team members to clearly communicate the aims of the storylines and the qualities of the scents that were being used in the formulas.

The evaluation process was carried out through smelling sessions with Dr Leistenschneider and the Odeuropa group, and then feedback sessions with the perfumers at IFF. As discussed above, it was important to be clear on the story we wanted to tell with each of the stops on the tour. For instance, the aim of Helena Schermer's portrait was to tell the story of her scented gloves. The scents were meant to demonstrate the malodorous process of tanning leather, and the perfumes adopted to fragrance and overpower the scent of tanned leather. It was a fine balance between creating a smell that could evoke the foul smell of tanned leather, and create a fragrance formula that convincingly masked the fouler aspects of leather. Through consultation with Museum Ulm, Odeuropa, and IFF, the IFF perfumers developed drafts of the scent. It took as many as three drafts of the scent until we were satisfied with it.

Heritage Scents of Museum Ulm's Follow Your Nose!

Helena's Gloves | mimosa, cypress, myrtle, jasmine, neroli, rose water, orris, incense, amber, musk, civet, tolu

Eitel Besserer's Pomander | rosemary, oregano, cinnamon, rose, lavender, clove, civet, ambergris, musk

The Smell of Hell | cade oil, Indole, skatol, civet, clove bud oil

****These scents were created by IFF in collaboration with [Museum Ulm](#) as part of the Odeuropa Project.***

How and why did you choose your chosen method of smell distribution?

Lizzie Marx: During the development of the project, we explored several options, including blotters, scented hand fans, and handheld dry diffusion (Whispi). Handheld dry diffusion was eventually selected, as, unlike a hand fan, the individual user could control the amount of scent diffusion through varying the amount of pumps. While blotters took time to prepare in advance of a guided tour, the handheld dry diffusion method held the scent for far longer than blotters, and did not need to be replenished with scent quite so often.



Caption: Museum Ulm's curator, Dr Eva Leistenschneider using handheld dry diffusion to sniff the Smell of Hell in front of Martin Schaffner's, *Christus in der Vorhoelle (Christ in Limbo)* from 1519. Photo credit Sofia Collette Ehrich.

However, adopting the handheld dry diffusion method for the tours presented some issues: when the scents were in storage, they were kept in airtight containers. Dr Leistenschneider reported that the scents were "leaking" and, as they were stored near the museum's offices, they were proving to be disruptive to the staff's work environment. While they were the most effective method for the guided tour, specialised storage needed to be taken into consideration.

Did you develop malodors as a part of *Follow Your Nose!*?

Lizzie Marx: Yes, we developed two malodours for the tour and two further scents that were considered neutral, but turned out malodorous for certain participants. For Martin Schaffner's painting *Christ in Limbo*, we developed a scent to evoke the Smell of Hell. While the scent was one of the most repellent on the tour, it received one of the strongest responses. Developing a fragrance that represents a concept that is familiar to the visitor yet has an unknown smell can generate an enthusiastic response.



Caption: Martin Schaffner, *Anastasis / Christ in Limbo*, 1549, oil on panel. Image courtesy of Museum Ulm, Germany.

We were mindful that the olfactory tours are a cultural activity that should surprise and enrich but not disturb. Working with perfumers who are trained to design fragrances rather than malodors, was helpful in this regard. They were adept in ensuring that the malodorous scents were notably unpleasant and generated discussions from the participants, but not intensely foul enough that participants no longer wished to continue on the tour.

When conducting an olfactory guided tour, how do you usually present the scents in relation to the olfactory history, relevance, and storytelling?

Lizzie Marx: The order of telling the story and sampling the smell was not prescriptive and could vary according to the needs of the storyline. It was advised that tours started and ended with a pleasant or neutral scent, and that a balance of malodorous and pleasant scents were used, with preference of pleasant scents. It is usually helpful for a guided tour to provide the (historical) context of the scent before sampling it, so as to anchor the associations of the fragrance to the storyline. However, there are advantages to sampling the scent in advance of sharing the storyline. The smell of the pomander, for instance, is a complex scent that consists of many ingredients. Asking participants to smell the fragrance and then share their initial impressions of what ingredients they could identify was an opportunity to stimulate discussion among the group. The experience of the scent is then further enriched by providing the storyline.

During the guided tours, how did the different target groups respond to the smells and the space differently?

Lizzie Marx: I noticed that senior visitors of the guided tour had particularly nostalgic associations with the scents. The rose elements from Helene Schermer's scented gloves reminded certain participants of the fragrances worn by their mothers or grandmothers. In another case when I observed a selection of guided tours, I was impressed to see how engaged a final-year school group was. Dr Eva Leistenschneider, the curator of Museum Ulm who was also instrumental to the

development of the tours, said this was exceptional for a guided tour of their age group. This suggests that the smells of the olfactory guided tour kept their attention.

What precautions did you take to ensure a safe experience for the GLAM's staff, visitors, space, and collection?

Lizzie Marx: When a malodour was diffused, participants were given due warning. Tour guides were also encouraged to note to participants how evocative scents can be in reviving particular memories - some positive, but also negative. Preparing visitors helped to work through any unexpected responses to the scents.

How does safeguarding of olfactory heritage and engagement with smells contribute to worthwhile storytelling in GLAMs?

Lizzie Marx: When smell is integral to the meaning or interpretation of an artwork or object, engaging with the smells that they reference adds an entirely new dimension to the experience. It can deepen our understanding of history and heritage, and can bring it to life. Incorporating smells into GLAM initiatives also creates the possibility for new audiences to create meaningful connections with GLAMs.

The olfactory is a large but, until only recently, neglected part of our heritage. If it is not safeguarded, then we are at risk losing a significant part of our heritage. Getting acquainted with olfactory heritage presents an opportunity to understand and engage with the past in new and exciting ways. Showcasing elements of olfactory heritage presents research that is both novel and engaging, and creates opportunities to draw in new audiences to GLAMs.

Relevant Literature

Want to open your nose further and expand your knowledge on the history of smell? Below we have listed explorations of smell that range across history, psychology, chemistry, and ecology. The below literature was also instrumental and influential to the development of this resource.

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Imprint

Published by:

The Odeuropa Project

www.odeuropa.eu

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Acknowledgements:

Special thanks goes to our Odeuropa Interns, Christina Kotsopoulou, Vania Lopez, and Padmini Anbalagan. A special thanks also goes to IFF especially to Bernardo Juan Fleming for making the

Odeuropa events perfectly scent-sational. And lastly, a special thanks goes to the Odeuropa Advisory Board members for their support and feedback throughout the resources development.

This resource would not have been possible without the trailblazing research of Lizzie Ostrom, Jim Drobnick, Chandler Burr, and Mathilde Castel.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101004469. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

Overview of Olfactory Storytelling Toolkit Resources

See below an overview of each of the downloadable resources, which are connected to the

Section 1: Curating Olfactory Narratives:

OST Resource 1 - *Cards to Design Olfactory Narratives*: This resource helps the user think about how scents link to the items, main themes, and storylines in their collection. The fill-in worksheet is designed for printing and cutting and it offers a series of pro-forma cards that can be filled in and moved around as you wish.

OST Resource 2 - *Olfactory Keywords*: Digital collections hold a lot of artworks with olfactory relevance, however, many are not equipped with such vocabularies. This resource is a list of smell terms in six languages: Dutch, English, French, Latin, Italian, Slovenian. This list will assist users navigate digital collections, providing them with specific vocabulary words to search for.

OST Resource 3 - *Nose-First Art Historical Odour Wheel*: This resource offers a fun and simple way for users to find olfactory stories in their collections. The odour wheel starts with scent families in the first ring, which connects to odourants in the second ring, and specific artworks and artefacts in the third ring, ending with an outer ring with Iconclass codes. Iconclass is a database that many GLAM institutions use to categorise and name their collection items and metadata.

OST Resource 4 - *Smellwalk Form*: This resource is a worksheet that the user can use when conducting smellwalks. The document helps the leader of the smellwalk participants through the smellwalk process and what to reflect on. The form was developed by Victoria-Anne Michel as part of her PhD research in the Odeuropa Project.

OST Resource 5 - *Smellwalk Guidelines*: This resource is to be used for carrying out smellwalks in and around heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct smellwalks.

Section 2: Creating a Heritage Scent

OST Resource 6 - *Heritage Scent Design Brief*: This resource is a form that assists cultural heritage professionals, historians, and researchers in the process of making a scent for the use of olfactory storytelling. It outlines all the information necessary for a scent designer/perfumer to make a smell interpretation intended for the use of olfactory storytelling. This brief is part 1 of a 2 part scent development process.

OST Resource 7 - *Heritage Scent Design Brief Example*: This resource is a completed Heritage Scent Design Brief (OST Resource 6) for Odeuropa's Liberty Bell Smell. The resource is meant to assist the user's own completion of a Heritage Scent Design Brief.

OST Resource 8 - *Heritage Scent Development Report*: This form provides the opportunity for the scent designer to reflect on the creation of a scent intended for olfactory storytelling. This includes the process and the materials used for the smell creation. The document is to be filled out by the scent designer. This report is part 2 of a 2 part scent development process.

OST Resource 9 - *Heritage Scent Development Report Example*: This resource is a completed Heritage Scent Development Report (OST Resource 8) for Odeuropa's Liberty Bell Smell. The resource is meant to assist the user's own completion of a Heritage Scent Development Report.

OST Resource 10 - *Guidelines for Evaluating Heritage Scent Creations*: This resource provides different guidelines for evaluating heritage scent creations made for the purpose of olfactory storytelling in GLAMs. We propose three different evaluation schemes: an isolated evaluation, a contextualised evaluation, and a peer review evaluation.

Section 3: Olfactory Event Design

OST Resource 11 - *How to Conduct Olfactory Guided Tours*: This resource is a guideline and instructional guide for conducting olfactory guided tours in heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct olfactory tours.

Storyboarding. Cards to Design Olfactory Narratives.

From Proust's madeleine dipped in tea to the smell of petrol, and all the myriad odours in between, scents link us to places, times, and memories. In an olfactory narrative smell is the 'narrative glue' that holds different constellations of items together. On the Odeuropa project we created digital Storylines in a 'choose your own adventure' format using the open-source tool [Twine](#), which allows you to create story-boards composed of cards that are linked together into narratives. You can use a similar principle in thinking about how to choose olfactory narratives in your own collection. In this worksheet, which is designed for printing, cutting, and playing, we offer a series of pro-forma cards that can be filled in. You can use these to think about the ways that smells link your collection items together.

What is on the cards? We have split the cards into six types: items, smells, noses, places, practices, and feelings. Each of these cards has pre-set questions that you can scribble answers into based on the information that you have acquired from your collections, from reading research on smell and the past (for a growing bibliography of work see the [Past Scent bibliography](#)), and from further research using tools such as the [Odeuropa Smell Explorer](#) or Encyclopaedia of Smell History and Heritage. Each of the questions on the cards are opportunities to think which smells, noses, places, practices, or feelings that card might link to. They offer some ways of providing olfactory context to your collections.

How do you use the cards? The goal of these cards is to explore potential connections between items in your collections through smell and arranging them into a narrative or story across time and space. We recommend starting with an 'Item' card for any item in your collections (a painting, sculpture, artefact, book, etc.). Fill this out by answering the questions. Based on the smells you describe, you should then have several options to answer multiple 'Smell' cards. For example, you might fill out an 'Item' card for a pomander from your collection, which is a common item of fragrant jewellery. You find that these often contained materials such as rosemary, musk, or clove, so you fill out 'Smell' cards for each of those scents. Based on your answers, this will lead you on to other items, or to 'Practice', 'Space', 'Nose', and 'Feeling' cards. In turn you might use these to find and fill in other 'Item' cards based on your collection, which then can again link to your already completed cards. Each card might link to several others and so slowly you will build up a map of olfactory connections across your collections!

Ok, show me the cards! On the next pages you can find a set of printable cards. These are the dimensions of regular tarot cards (in case you want to stick them onto a card for more rigidity). There are 2 object cards, 2 smell cards, 1 nose card, 1 place card, 1 practice card, and 1 feeling card.

Item Name: _____

Catalogue ref: _____

What does the item smell like now?

What has it smelled like in the past?

Odorous materials or production methods?

Visually or textually referenced scents?

Smell Name: _____

What is/are the source(s) of the scent?

How is/has the smell been described?

Where is/was the scent found?

Who would have smelled this scent?

Source(s):

Item Name: _____

Catalogue ref: _____

What does it smell like now?

What has it smelled like in the past?

Odorous materials or production methods?

Visually or textually referenced scents?

Smell Name: _____

What is/are the source(s) of the scent?

How is/has the smell been described?

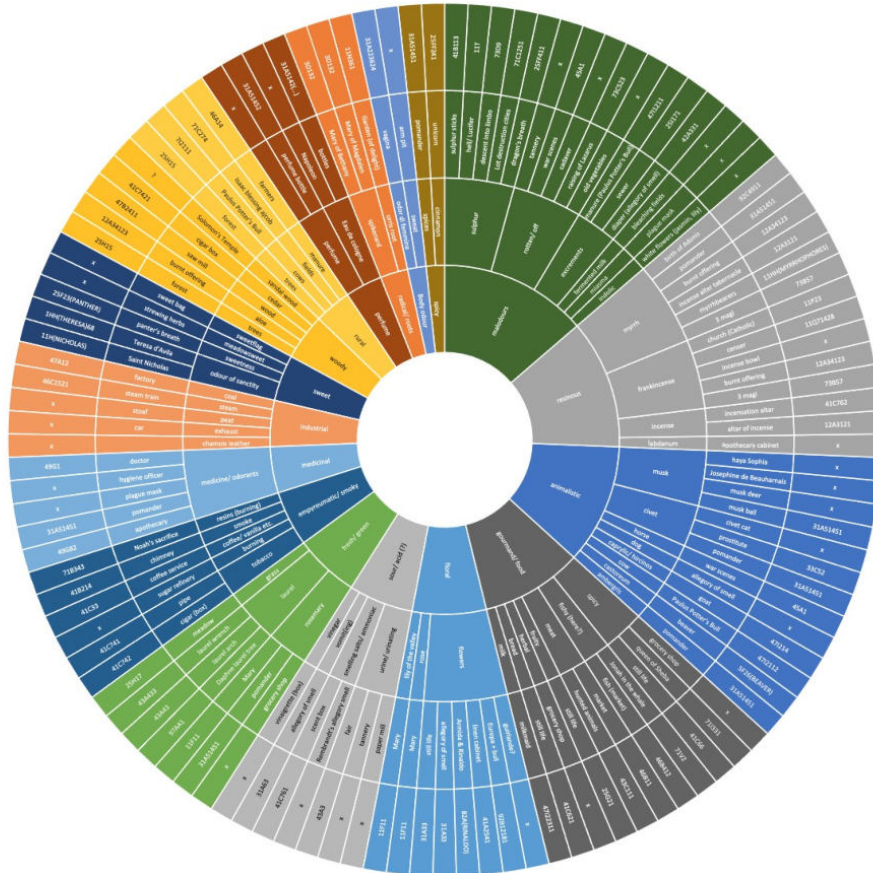
Where was/is the scent found?

Who would have smelled this scent?

Source(s):

<p>Practice Name: _____</p> <p>Who performed and/or smelled this practice?</p> <p>Did the practice produce smells? Which smells?</p> <p>Did the practice get rid of/interact with/cover up smells? Which ones?</p> <p>Where did this practice take place?</p> <p>Source(s):</p>	<p>Nose Name: _____</p> <p>Describe the biographical aspects of the nose.</p> <p>What odours might the nose be familiar with?</p> <p>Where might the nose encounter these odours?</p> <p>Did this nose change over time?</p> <p>Source(s):</p>
<p>Place Name: _____</p> <p>What smells could be found in this place?</p> <p>Did the smells in this place change over time (day, week, season, year, decades, centuries?)</p> <p>Who experienced the smells of this place and how did they describe them?</p> <p>Source(s):</p>	<p>Feeling Name: _____</p> <p>What smells produced this feeling?</p> <p>Who experienced this feeling in reaction to a smell?</p> <p>Did these feelings connect smells to particular identities?</p> <p>Source(s):</p>

Odeuropa’s Nose-First Art Historical Odour Wheel



Caption: The Odeuropa “Nose-First Art Historical Odour Wheel” starting from scent families in the first ring, connected to odorants in the second ring, and then to artworks and artefacts around that, ending with an outer ring with [IConclass codes](#). Please note that the colours of the wheel are arbitrary.

SMELLWALK -

Preliminary talk with the participants

- 6 minutes for each stop.
- Report any smells you notice during the transitions - you will have the chance to write about them at the back of each page.
- Note any sensory cues that you find relevant during the tour - be an extra-sensitive sensor!
- Definitions:
 - **Sensory analogy:** metaphor that uses similarities between experiences perceived by different perceptual modalities.
 - **Top notes:** the fleeting, short-lived smells to which your attention is particularly directed.
 - **Middle notes:** the periodic smells, linked to the season and/or the time of day.

- **Base notes:** the smells continuously perceived and which form a background.
- **Intensity:** the strength of a smell. The ranking goes from 1 to 6: 1 being almost imperceptible and 6 being extremely strong.
- **Congruence:** the quality of a smell to be similar or in accordance with the place. The ranking goes from 1 to 6: 1 being totally out of place and 6 being in coherence with the place.

Analogy: at the end of the tour

If this tour was...

- A colour: _____
- A sound/music: _____
- A shape: _____
- A texture: _____
- A time and/or space: _____
- A person: _____
- Any other element: _____

Place :

List all the smells you can perceive as soon as you enter using adjectives, sensory analogy, sources, personal evocations, ...

Describe the space sensorially (activity, light, temperature, sounds, colour, atmosphere, ...)

Select one :

Intensity

Coherence

Description (personal evocations, adjectives, sensory analogies, sources)

Top note

1 2 3 4 5 6

1 2 3 4 5 6

Middle note

1 2 3 4 5 6

1 2 3 4 5 6

Base note

1 2 3 4 5 6

1 2 3 4 5 6

Left smells: Transitory Places

Report any smell you notice when going from one stop to the next. It could be in the elevators, the corridors, the toilets, etc.

Describe the smell using adjectives, sensory analogies, sources, personal evocations, ... and rate its intensity and coherence.

Note any sensorial cues that you find relevant such as activity, light, temperature, sounds, colour, atmosphere, etc.



Resource for Using Smellwalks for Olfactory Storytelling

This document is a resource for using smellwalks as a tool of olfactory storytelling in and around heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct smellwalks.

Contents of this document include:

1. What are the essentials of smellwalking?
2. Overview of what to do before, during and after smellwalking
3. Do's and don't's of smellwalking

1. What are the essentials of smellwalking?

Supply Checklist:

- Water resistant pens
- Pencils
- Clipboard
- Coloured markers
- Paper, documents, and devices (e.g. audio recorder) to keep track of smellwalk encounters and thoughts

2. What do I do before, during, and after a smellwalk?

Before

1. *Start by deciding on the goals of your smellwalk.* Have a clear understanding of what you want to achieve through the smellwalk and why. As a heritage institute, you can use smellwalks to help participants experience the space or the collection in a new way or raise awareness around the importance of the sense of smell when engaging with your collection.
2. *Decide on a location and gather participants for your smellwalk.* Establish contact with the community around the location of the smellwalk. As a heritage institution yourself, it may be contacting colleagues within your own institution to ensure accessibility to certain rooms. Communicating about your smellwalk through social media and other communication platforms is helpful for spreading the word. Keep the smellwalk group under 12 participants.

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3. *Prepare for your smellwalk.* Gather supplies and plan a route. Research the location's history and functions throughout time. You may want to take a look at your institution's digital archive for information or ask your host institution for more information.
4. You may want to provide participants with smellwalk documentation. Kate McLean's [Smellfie Kit](#) provides an approach based on data collection via visual analysis while Victoria-Anne's document (OST Resource 4) provides data collection via sensory analogies and reflections on personal memory.

During

1. *Launch the smellwalk with an introductory 'speech.'* Explain the objective and process of the smellwalk to participants. It is important to also be open and ready for unexpected and spontaneous happenings.
2. *Guide the smellwalk and observe.* Appear both reliable but also give your participants space to discover the space on their own. Your role in the smellwalk is shaped by remaining both attentive while also allowing participants to shape their own experience.
3. *Wrap up the smellwalk and open up for feedback.* A short debrief offers more opportunities to reflect and check in with the participants. It also provides you with information on how to improve the format or content for future smellwalks.

After

1. *Reflect on the smellwalk experience.* Directly following the smellwalk, take time to write down your first impressions and observations and discuss with your colleagues about how it went.
2. *Present smellwalk reflections.* Visitor reflections can be used creatively and in a wide range of formats, from watercolours to poetry, wordclouds to smellmapping. This invites the public to think about the olfactory impressions of their surroundings.

3. Dos and Don'ts of smellwalking

DO:

- Do bring the necessary materials, be it forms, pens, clipboards, audio-recording devices, odorants, and diffusion devices.
- Do bring water as smellwalks can be tiring for the body and induce olfactory fatigue. Drinking water can help cope with both.

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- Do keep the number of participants for a smellwalk between 5-8 participants with a maximum of 12.
- If conducting the smellwalk in a public space, do inform the regular users of the place about what you are doing. This limits the risk of having them interrupting or distracting the smellwalking group.
- Do take notes of participant observations, environmental conditions, and sensory perceptions throughout the smellwalk.

DON'T:

- Don't wear perfume, as it might influence the participant's olfactory experience and relation with the smellscapes of the place.
- Don't talk too much, for similar reasons as above. Olfaction can be easily influenced, partly due to a lack in cultural awareness and attention as well as lack of a specific vocabulary to describe those perceptions.
- Don't interfere with situations that arise spontaneously, even if participants start talking with each other.

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Part 1: Heritage Scent Design Brief

This worksheet is part of a sequence of worksheets to assist the development and creation of a heritage scent for the use of olfactory storytelling:

Part 1 - Heritage Scent Design Brief

Part 2 - Heritage Scent Development Report

Part 1 - The Heritage Scent Design Brief is a form that assists cultural heritage professionals, historians, and researchers in the process of making a scent for the use of olfactory storytelling. It outlines all the information necessary for a scent designer/perfumer to make a scent interpretation intended for the use of olfactory storytelling.

*This document is to be filled out by the cultural heritage professional, historian, or researcher who is co-developing/commissioning the scent for its use. A Heritage Scent Design Brief should be created for **every heritage scent** created, regardless if the smell is among several.*

Note: This document may be adapted for individual use.

Project Details:

Description of the exhibition/project/event:

Title of exhibition/project/event for which the smell is intended:

Institution:

Location:

Projected test tour date:

Projected opening date:

Total number of smells:

Scent distribution method(s):

Person of Contact:

(Historical) Background Information

- 1. What artwork, artefact, text, or space is the smell representing or referring to? (where applicable, include a visual representation and description)**

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Response:

[Insert image/artwork/artefact and caption here]

- 2. How does the smell relate to the artwork, artefact, text, or space? (e.g. a detail in a painting, the inherent smell of an apothecary cabinet):**

Response:

- 3. Intended function of the smell (e.g. educational, emotional, crossmodal etc.):**

Response:

- 4. How will the public engage with this smell/how is the smell presented and/or delivered? (e.g. on a blotter with a tour guide's verbal description)**

Response:

- 5. Context and/or (art) historical background:**

Response:

Information on Intended Heritage Scent Creation

- 6. Hedonic tone (pleasant, neutral, unpleasant perception):**

Is the smell creation a malodour or fragrance?¹ On the scale below, choose the desired level of hedonic perception. Then include a couple of sentences that would help the scent designer understand why this was chosen in the "Notes."

Score	Perceived hedonic tone
+4	Very pleasant
+3	Pleasant
+2	Moderately pleasant
+1	Mildly pleasant
0	Neutral odour/no odour
-1	Mildly unpleasant
-2	Moderately unpleasant
-3	Unpleasant

¹ For a detailed explanation of these categories, see Olfactory Storytelling Toolkit section 2, chapter 1 on 'How to find the appropriate smells for olfactory storytelling.'

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-4 Very unpleasant

Note:

7. Proposed materials/notes for the smell creation:

a. Is this a single ingredient representation or composition?

b. Proposed materials (e.g. cloves, rose):

c. Source information:

8. Creative Liberty of Perfumer (especially if using a historic recipe in #4):

Indicate here how closely the perfumer should follow the materials listed above. You are welcome to circle one of the following indicators of authenticity below:²

Materially Informed Reconstruction / Historically Informed Interpretation / Artistic Translation

Response:

9. Additional Notes:

This heritage scent is proposed by:

Name(s)

Date

Next steps:

- Provide a copy of this document to the scent designer along with *Part 2: Heritage Scent Development Report*, to be filled out by the scent designer.
- Plan a meeting with the involved scent designer where you review the document together.
- Upon receiving the scents, make sure you receive (1) a completed *Part 2: Heritage Scent Development Report*; and (2) the safety sheet.

Note: account time for at least one evaluation round.

² For a detailed explanation of these categories, see Olfactory Storytelling Toolkit section 2, chapter 1 on 'How to find the appropriate smells for olfactory storytelling.'

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The resource below is a completed Heritage Scent Design Brief (OST Resource 6) for Odeuropa's Liberty Bell Smell. The resource is meant to assist your own completion of a Heritage Scent Design Brief.

Part 1: Heritage Scent Design Brief

This worksheet is part of a sequence of worksheets to assist the development and creation of a heritage scent for the use of olfactory storytelling:

Part 1 - Heritage Scent Design Brief
Part 2 - Heritage Scent Development Report

Part 1 - The Heritage Scent Design Brief is a form that assists cultural heritage professionals, historians, and researchers in the process of making a scent for the use of olfactory storytelling. It outlines all the information necessary for a scent designer/perfumer to make a scent interpretation intended for the use of olfactory storytelling.

*This document is to be filled out by the cultural heritage professional, historian, or researcher who is co-developing/commissioning the scent for its use. A Heritage Scent Design Brief should be created for **every heritage scent** created, regardless if the smell is among several.*

Note: This document may be adapted for individual use.

Project Details:

Description of the exhibition/project/event: This scent will be prepared for Odeuropa's participation in the major academic history conference held by the American Historical Association in Philadelphia. The American Historical Review has asked Odeuropa to present a smell connected to the city of Philadelphia, USA: a smell that can be distributed amongst the conference participants.

Title of exhibition/project/event for which the smell is intended: Liberty Smells

Institution: Odeuropa and the American Historical Review

Location: Philadelphia, USA

Projected opening date: January 4th, 2023

Total number of smells: 1

Scent distribution method(s): Smell Card in Plastic Sleeve

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(Historical) Background Information

1. What artwork, artefact, text, or space is the smell representing or referring to? (where applicable, include a visual representation and description)

Response:

Title of Object - Liberty Bell, 1752, recast 1753, Lester and Pack (Whitechapel Bell Foundry), 70% Copper, 20% Tin, 10% other metals, 4ft tall



2. How does the smell relate to the artwork, artefact, text, or space? (e.g. a detail in a painting, the inherent smell of an apothecary cabinet):

Response:

The key connection that runs throughout the scent is that of metal, particularly molten metal. This includes copper, bronze, tin, iron, and other metals used in bell foundries, where the liquid metal is tipped into molds made from manure, horse hair, and clay. The same substances are then reworked in fires, since the eighteenth century usually coal fires, into cannons. Cannons, when used, would have been associated with the sulphur scent of gunpowder.

The same process of melting metals has occurred for statues (the Statue of Liberty is crafted from copper). After Waterloo, French cannons and cannonballs were melted down in order to create a statue of the Duke of Wellington that sits outside London's Royal Exchange. On the other hand, historical regimes - including the Vichy regime in 1940s France - melted down statues of historical

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figures in order to use the materials for industrial-military production. Much like history itself, statues, bells, and cannons are constantly being remade - canonised and decanonised.

Of course, these foundries have emitted - and continue to emit - plenty of foul smells from burning metals, chemicals, and fuels. Black smoke, including the acrid stench of sulphur dioxide, were emitted by the foundries that made bells and cannons.

Ironically, metals have been central to deodorisation - zinc oxide and aluminium in deodorants have had the power to stopper the pores and prevent perspiration since the 1880s. The desire to be free from stink has drawn on the powers of metals. On the other hand metal pollution of all kinds has spread through our rivers and atmosphere, for example as emphasised by the lead that contributed to the Flint Water Disaster. The smell of metals is therefore the smell of money - linked to commercial deodorant production and the outpouring of pollution from industries, but also because money itself has been crafted from various types of metal.

There is also a link here between smell and value in heritage terms too. Bells and statues are central forms of commemoration, but both the process of producing them and their finished results do have a particular smell.

3. Intended function of the smell (e.g. educational, emotional, crossmodal etc.):

Response:

The intended function of the scent is to be a demonstrator for an audience of historians in how we can offer an interpretation of the past in the form of an historical argument embedded in a scent. The argument at work here is that the pursuit of liberty has often had negative olfactory impacts and that, in fact, the smell of liberty is actually often the smell of what many would describe as pollution.

4. How will the public engage with this smell/how is the smell presented and/or delivered? (e.g. on a blotter with a tour guide's verbal description)

Response:

This scent will be prepared for Odeuropa's participation in the major academic history conference held by the American Historical Association in Philadelphia, USA. The American Historical Review has asked Odeuropa to present a smell connected to the city of Philadelphia: a smell that can be distributed amongst the conference participants as Odeuropa presents their panel. The smell will come in the form of a smell card which has a QR code on the back of the card that provides a webpage with more in depth information about the historical significance and scent development process.

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5. Context and/or (art) historical background:

Response:

In this case, what are the olfactory storylines connected to the artwork, artefact, text, or space?

The idea is to base the smell on the Liberty Bell, the historical bell associated with the American Revolution, which can be found in Philadelphia. In a sense the intended scent refers to both an artefact - the Liberty Bell - and the more general relationship between liberty and smell in U.S. history. Here are the connected storylines:

Bells and Cannon, Peace, and War:

The Liberty Bell, a potent symbol of American independence, was commissioned in 1751 by the Pennsylvania Provincial Assembly and was produced by the English, London-based, bell founders Lester and Pack in Whitechapel. The bell was initially associated with the Second Continental Congress's vote for independence in July 1776 (though it is unlikely that it was in fact rung at that time) and was later taken up by abolitionist societies in the 1830s. R. G. Williams noted in 1835 that whilst the bell's surface was decorated with the claim that it would "Proclaim Liberty Throughout All the Land Unto All the Inhabitants thereof," "the bell has not obeyed the inscription; and its peals have been a mockery, while one-sixth of 'all inhabitants' are in abject slavery'." Displayed in Independence Hall and, from 1976, on Independence Mall, the bell became a popular locus point for protests in the 1960s - that included the civil rights and anti-war movements - and a symbol of Western freedom during the Cold War.

The bell has a material history: from its initial founding in London, through its transportation to the U.S., and in the contexts in which it was displayed. But this artefact is also connected to endangered heritage: the final bell was cast at Whitechapel in June 2017, this last item was donated to the Museum of London, and the building was sold. It is now possible that the once busy site of production will be turned into a boutique hotel. This would be symptomatic of a broader turn from industry to services that has characterised the UK economy during the twenty-first century. The distinctive smell of the foundry will be lost: from the scent of molten metal to the air-conditioned fragrance of a hotel lobby. Benjamin Kipling, a bell-tuner who worked at Whitechapel, said that he would "never forget the atmosphere, the smell of it all." 'It all' being the steaming molten bronze and the horse hair, manure, and clay used to mould the bells, a combination which has also been described as an 'alchemical odour.'

This material history also connects to other stories. Calls for liberty - and the revolutions from which they spring - often lead to violent conflict. Throughout the American and French revolutions - and indeed through the American Civil War and the World Wars of the twentieth century - bells were

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melted down and transmuted into cannons. In the 1860s one poem by F. Y. Rockett appealed to confederate supporters to 'Melt the Bells,' ending with a promise that the cannons thus produced would be melted back into bells again at the end of the war and used to celebrate and commemorate the lives lost. This constant flow of metal back and forth between bells, rung to celebrate or commemorate peace, and the armaments used to prosecute war, has been a long-running characteristic of European and American history. Metal reshaped in the bell and cannon-foundry just as societies were reshaped in the cauldron of conflict. It is not far from the smell of horse manure and molten metal in the foundry or the musty scent of churches and belfries, to the battlefield stench of sweat, gunpowder, and death.

Liberty Stinks?:

As this suggests, liberty – and its consequences – does not always smell great. The Liberty Bell has become a symbol of the values of freedom that the United States supposedly holds dear. But, in the case of smell, freedom is a tricky subject. What do we value more: the freedom to stink or the freedom from stink?

On the one hand, the desire to be free from the smell of others has made the United States a notoriously odourphobic society. In 1888 it was the country that developed the first modern commercial mass-produced deodorant, sold under the brand name 'Mum'. But ensuring freedom from other's perspiration involved using print advertisements to teach Americans to internalise a disgust for, and vigilance against, body odour. In this culture of shame women in particular were told that 'unpopularity often begins with the first hint of underarm odour' and that 'perspiration odour ruins romance'. Today a poisonous mix of misogyny and racism fuels a mass-market for deodorants (often including metals such as zinc oxide and aluminium) of all types ranging from underarm applications to vaginal douches that particularly target African-American women and which can cause negative health outcomes for their users. Freedom from smell for some means entrapment in a commercially-promoted culture of shame for many. This desire to be free from smell has also had negative environmental impacts: from the nineteenth-century soap factories that released their waste into rivers to the chlorofluorocarbons in aerosols that depleted the ozone layer and the volatile organic compounds that replaced them and which are now causing further air pollution.

On the other hand, the U.S has historically been more liberal when it comes to allowing businesses to stink. Despite the Clear Air and Clean Water acts toxic pollution continues to be a real threat to populations, especially non-white communities, from the Flint Water disaster (in which lead was allowed to enter the water sources in Flint) to the sulphurous emissions of paper and cardboard mills. Again and again we witness the alchemical power of capitalism to rename a stink into a sweet

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perfume and, in doing so, rebut attempts to regulate and close off the freedom of factories to pollute. Growing up in Piedmont West Virginia in the 1950s, Henry Louis Gates Jr. described how the

acid, sulphurous odour of the... paper mill drifts along the valley, penetrating walls and clothing, furnishings and skin. No perfume can mask it. It is as much a part of the valley as is the river, and the people who live there are not overly disturbed by it. "Smells like money to me", we were taught to say in its defence, even as children.

As long as it makes money, U.S capitalism is happy to call a base stench fragrant gold. When it comes to air and odour, life, liberty, and property, are often mutually exclusive rights for many of those living in the U.S.

Information on Intended Heritage Scent Creation

6. Hedonic tone (pleasant, neutral, unpleasant perception):

Is the smell creation a malodour or fragrance?¹ On the scale below, choose the desired level of hedonic perception. Then include a couple of sentences that would help the scent designer understand why this was chosen in the "Notes."

Score	Perceived hedonic tone
+4	Very pleasant
+3	Pleasant
+2	Moderately pleasant
+1	Mildly pleasant
0	Neutral odour/ no odour
-1	Mildly unpleasant
-2	Moderately unpleasant
-3	Unpleasant
-4	Very unpleasant

Note: The scent should be challenging and make people think - but not too stinky since people will carry the smell around in their conference bags

7. Proposed materials/notes for the smell creation:

a. Is this a single ingredient representation or composition?

Composition

¹ For a detailed explanation of these categories, see Olfactory Storytelling Toolkit section 2, chapter 1 on How to find the appropriate smells for olfactory storytelling.

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b. Proposed materials (e.g. cloves, rose):

Molten metal, Copper, tin, zinc, aluminium, iron, Coal fire, Sweat, Money, Sulphur

c. Source information:

[The bells v the boutique hotel: the battle to save Britain's oldest factory | London | The Guardian](#)

8. Creative Liberty of Perfumer (especially if using a historic recipe in #4):

Indicate here how closely the perfumer should follow the materials listed above. You are welcome to circle one of the following indicators of authenticity below:²

Materially Informed Reconstruction / Historically Informed Interpretation / Artistic Translation

Response: Smells of bells can be experienced easily by visiting a foundry or a city with bells. It would be interesting to capture the atmosphere of a foundry in which things of great importance are being forged: heat, smoke, sweat, metals, burning. A sense of being enveloped in that fierce, cauldron-like, atmosphere.

9. Additional Notes:

This Heritage Scent is Proposed by:

William Tullett, Inger Leemans, Sofia Collette Ehrich

August 30th, 2022

Name(s)

Date

Next steps:

- Provide a copy of this document to the scent designer along with *Part 2: Heritage Scent Development Report*, to be filled out by the scent designer.
- Plan a meeting with the involved scent designer where you review the document together.
- Upon receiving the scents, make sure you receive (1) a completed *Part 2: Heritage Scent Development Report*; and (2) the safety sheet.

Note: account time for at least one evaluation round.

² For a detailed explanation of these categories, see Olfactory Storytelling Toolkit section 2, chapter 1 on How to find the appropriate smells for olfactory storytelling.

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Part 2: Heritage Scent Development Report

This worksheet is part of a sequence of worksheets to assist the creation of developing a heritage scent for the use of olfactory storytelling:

Part 1 - Heritage Scent Design Brief

Part 2 - Heritage Scent Development Report

*This form provides the opportunity for the scent designer to reflect on the creation of a scent intended for olfactory storytelling. This includes the process and the materials used for the scent development. The document is to be filled out by the scent designer. A Heritage Scent Development Report should be created for **every heritage scent created**, regardless if it is intended for the same exhibition/project/event.*

Project Details:

Title of exhibition/project/event for which the smell is intended:

Institution:

Location:

Projected test tour date:

Projected opening date:

Total number of smells:

Scent distribution method(s):

Person of Contact:

Profile of the Scent Designer:

Name:

Company/Institution:

1. Do you specialise in a certain type of olfactory design? (e.g. perfumes, air fresheners, detergents):

Response:

Heritage Scent Description:

2. For which artwork/artefact/smellscape is this made for?:

Response:

3. Please provide a description of your scent creation (e.g intensity, hedonic tone, notes):

Response:

4. What narrative do you want to achieve through your scent creation?:

Response:

5. What is the olfactory pyramid of the smell? (e.g. Top, middle, base notes):

Olfactive Pyramid

Top: Middle: Base:

6. What are the materials/notes of the smell? (e.g. clove, spicy)

Response:

7. Please provide the formula for your scent creation (if applicable):

- Please provide the name of the company who created the scent (IFF, GIV, FIR) & code (e.g. CAS Number, FEMA) of the ingredient (if applicable)
- Please provide the weight percentage of each ingredient

Ingredient	Company / Code	Weight
(example) Truffle black base 10% dpg	PCW	25

Personal Scent Design Process and Evaluation:

8. Did you conduct research or make site visits to design the smell?:

Response:

9. How does your creation compare to the historic description / recipe provided in the *Heritage Scent Design Brief*? (e.g. did you omit or add materials to the historical recipe?)

Response:

10. What components of the brief did you concentrate on?

Response:

11. How many versions did you develop?

Response:

Signed off by

Date

Next steps for scent designer:

- Provide a copy of this document to the person of contact.
- Plan a meeting with the person of contact where you review the document together.

- Upon providing the heritage scent samples, make sure you provide (1) a completed *Part 2: Heritage Scent Development Report*; (2) the safety sheet.

Note: account time for at least one evaluation round.

The resource below is a completed Heritage Scent Development Report (OST Resource 8) for Odeuropa's Liberty Bell Smell. The resource is meant to assist your own completion of a Heritage Scent Development Report.

Part 2: Heritage Scent Development Report

This worksheet is part of a sequence of worksheets to assist the creation of developing a heritage scent for the use of olfactory storytelling:

Part 1 - Heritage Scent Design Brief

Part 2 - Heritage Scent Development Report

This form provides the opportunity for the scent designer to reflect on the creation of a scent intended for olfactory storytelling. This includes the process and the materials used for the smell creation. The document is to be filled out by the scent designer. A Heritage Scent Development Report should be created for every heritage scent created, regardless if it is intended for the same exhibition/project/event.

Project Details:

Description of the exhibition/project/event: This scent will be prepared for Odeuropa's participation in the major academic history conference held by the American Historical Association in Philadelphia. The American Historical Review has asked Odeuropa to present a smell connected to the city of Philadelphia: a smell that can be distributed amongst the conference participants.

Title of exhibition/project/event for which the smell is intended: Liberty Smells

Institution: Odeuropa and the American Historical Review

Location: Philadelphia

Projected opening date: January 4th, 2023

Total number of smells: 1

Scent distribution method(s): Smell Card in Plastic Sleeve

Profile of the Scent Designer:

Name: Carole Calvez

Company/Institution: Iris & Morphée (Independent scent designer)

1. Do you specialise in a certain type of olfactory design? (e.g. perfumes, air fresheners, detergents):

Response: Olfactory Scenography (historical and emotional smells)

Heritage Scent Description:

2. For which artwork/artefact/smellscape is this made for?:

Response:

Title of Object - Liberty Bell, 1752, recast 1753, Lester and Pack (Whitechapel Bell Foundry), 70% Copper, 20% Tin, 10% other metals, 4ft tall



3. Please provide a description of your smell creation (e.g intensity, hedonic tone, notes):

Response:

Metallic, smoky, oxidated, leathery, a bit animalic, mouldy, strong

The smell aims to capture a smell that is between scientific facts and research and what a bell would actually smell like. Development of the smell was based on what I encountered during the visit to the bell Foundry.

4. What narrative do you want to achieve through your smell creation?:

Response:

When I create smells, I do not usually use top notes. This is better for perfumes for the skin because when you buy a perfume that you will wear you are influenced by the top notes. I usually work first with the heart and base notes because this gets most to the point. I also try to create short formulas so that the narrative for the formula is more distinct.

5. What is the olfactory pyramid of the smell? (e.g. Top, middle, base notes):

Olfactive Pyramid: not applicable; see formula below

Top: Middle: Base:

6. What are the materials/notes of the smell? (e.g. clove, spicy)

Response:

7. Please provide the formula for your smell creation (if applicable):

- Please provide the name of the company who created the scent (IFF, GIV, FIR) & code (e.g. CAS Number, FEMA) of the ingredient (if applicable)
- Please provide the weight percentage of each ingredient

Ingredient	Company / Code	Weight
Aldehyde C11 intrelevan BHA 1% dpg	IFF	200
Aldehyde C11 MOA 1% dpg	Symrise	20
Aldehyde C11 Undecyclic 907163 1% dpg	Firmenich	80
1-Octen -3-one (in 50% 1-octen- 3-ol) N628 10% dpg	Bedoukian	85
Citronellic acid 10% dpg	Synarome	160
Rose Oxid 10% dpg	MPE	10
Truffle black base 10% dpg	PCW	25
Oud Anokha	Firmenich	10
Birch rectified EO 1% dpg	MPE	40
Qsp dipropylèneglycol	MPE	370

Personal Scent Design Process and Evaluation:

8. Did you conduct research or make site visits to design the smell?:

Response:

9. How does your creation compare to the historic description / recipe provided in the *Heritage Scent Design Brief*? (e.g. did you omit or add materials to the historical recipe?)

Response:

First thing that was important was the proportion of the metal part because I had to think about how to create metallic smells. For me it was important that everything (molten metal, manure, horse hair) came well together. The Foundry talked a lot about the smell of molten metal and the horse hair. The idea and history of freedom was about battles and so it was important to relate the metals to battles. Freedom is abstract so I used a lot of aldehydes (metallic and powerful, wide, large and take a lot of space in a formula) when you smell it it gives an idea of something big. Freedom and Liberty and war is a big idea so a strong chemical compound is important. For the versions that had more animalic compounds (body odour, caprillic, castoreum), these versions were not liked as much so I replaced them.

Another interesting point was the idea that the smell of the foundry will be lost. We have to be able to keep smells that may be lost. For this, I really included smokey- the bell foundry that day was so smokey and I will not ever forget that smell. The creation aims to communicate the smell of the foundry as if the foundry disappeared.

10. What components of the brief did you concentrate on?

Response: See question 9

11. How many versions did you develop?

Response:

There were six versions. I may have tried a few more than that myself during the decision process. Some versions were more aldehydic but I did not want this to be too strong. When I visited the Foundry, it was so smoky that I wanted to capture this. Once you visit a place, things become more realistic. The people at the foundry mentioned the importance of wood and earth so I detached more from the metallic part and added more smokey and leathery components and emphasised some of the tools that were used in the bell making process. I really wanted an animalic part but because of the way people will receive the smell, I decided to be light with the animalic parts. During the smell's evaluation, the animalic parts were not favoured so this was another reason why I was light with these components.

Carole Calvez; Sofia Collette Ehrich

December 7th, 2022

Signed off by

Date

Next steps for scent designer:

- Provide a copy of this document to the person of contact.
- Plan a meeting with the person of contact where you review the document together.
- Upon providing the heritage scent samples, make sure you provide (1) a completed *Part 2: Heritage Scent Development Report*; (2) the safety sheet.

Note: account time for at least one evaluation round.

Guidelines for Evaluating Heritage Scent Creations

In this document we provide guidelines for evaluating heritage scent creations made for the purpose of olfactory storytelling in GLAMs. Heritage institutes are engaging more and more with scent designers to develop multisensory exhibitions and events. In the *Heritage Scent Design Brief* (OST Resource 6) and *Heritage Scent Development Report* (OST Resource 8) we provide a model for the development of heritage scents. But how do we evaluate these creations to ensure they communicate the desired message and have the projected impact on the audience? Based on past research, we propose three different evaluation schemes: an isolated evaluation, a contextualised evaluation, and a peer review evaluation.

Supply List for Scent Evaluation:

- Scented material to be evaluated
- Blotters
- Pen and paper
- *Heritage Scent Design Brief*
- Printed Images or Powerpoint of the collection items
- Water (to neutralise the nose during smell sessions)

Scheme #1: Isolated Evaluation

Evaluation scheme #1 consists of individuals smelling each (heritage) creation **without any contextual information**. In this process, evaluators smell each creation and note their individual reactions and associations on paper. This is followed by a group discussion. This evaluation method helps better understand possible initial reactions GLAM visitors may have when experiencing these smells.

Rate the following qualities:

Intensity (1 = very faint → 5 = very strong)

1 2 3 4 5

Hedonic tone (1 = very unpleasant → 5 = very pleasant)

1 2 3 4 5

If the creation was the following, what would it be?

A colour _____

A sound or musical composition _____

A shape _____

A texture _____

A time (period) or place _____

A person _____

Scheme #2: Contextualized Evaluation

Evaluation scheme #2 consists of individuals smelling each scent creation **with contextual information** (about the intended olfactory event and the images, objects, or spaces in and around where the smell will be presented). The scheme helps check connections between the scent and its projected context, and evaluate whether the creation is convincing and understandable.

Firstly, prepare a slide presentation or handout that displays the different objects presented in the olfactory storytelling. Also include other relevant information in the presentation (scent distribution method, total number of scents, intended audience etc.). Then ask the group members to connect the smells to the images via the following steps:

1. Present the different objects of olfactory storytelling via powerpoint or lay them out on a table.
2. Provide each evaluator with x number of blotters for x number of subjects presented.
3. Ask each evaluator to label each blotter with their name.
4. For each scent, collect a fresh (and *clean*) blotter from each evaluator and dip it in the bottle of your choice.
5. For each scent, ask evaluators to sniff and match to the artwork they believe fits the scent best.
6. Once all smells have been smelled and matched, open up room for discussion.

We recommend that you and your evaluators take notes as you may find that this evaluation technique will produce unexpected links and associations between smells and collection items. As a next step, you can invite evaluators to elaborate further, also providing reflection on the context in which the smells will be presented.

Scheme #3: Peer Review

Evaluation scheme #3 turns to curatorial, academic, and fragrance experts to peer review the heritage scent based on their own research and expertise. This method was developed for the evaluation of a recreation of a historical scent recipe, which was published in the [American Historical Review](#) (2022).

Provide the reviewers with the scent(s) and information about the creation process, including any research conducted (for example, via the *Heritage Scent Design Brief* and *Heritage Scent Development Report*). For peer reviews, we advise two sniffing sessions. If the scent was devised for a museum, the first sniffing session can attempt to imitate the intended context by sniffing the smell while viewing the artwork and reading the original text it is intended to accompany. The second sniffing session may consider the broader context of the intended olfactory event by thinking about the below questions.

Scent Details

Scent title/subject or artwork:

Academic authors/partners:

Creative authors/partners:

Format (alcohol diluted):

Review Questions:*

Reviewer Details

Reviewer:

Role and/or expertise:

Date of review:

**What is the smell intended to convey and how successful is it in doing so? Why or why not?
(ex. what “character” is the smell supposed to convey? A material, object, place, nose, feeling?)**

Response:

Does the scent advance our understanding of history and/or heritage (tangible or intangible - places or practices)? How does the scent add value to this understanding (that would not be possible through text or image alone)?

Response:

Does the overall composition and materials (olfactory pyramid) of the scent make sense? Are there individual materials within the composition that you think should be heightened, that could be less prominent, that are missing, or that should not be there? Do you feel the essential elements of the heritage scent (materials depicted in a scene, smells that make up a smellscape, ingredients in a historical recipe) are captured?

Response:

**Is the underlying research and methodology clear, well-documented, and convincing?
Thinking in terms of the processes which you are most familiar with (for example (art) historical research, close-reading, scent creation; heritage curation) could the research and methodology be improved or altered?**

Response:

Please disclose any knowledge or personal connection related to the scent, that may cause a conflict of interest or bias.

Response:



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Guidelines for Conducting Olfactory Guided Tours

This document is a guideline and instructional guide for conducting olfactory guided tours in heritage institutes. Heritage professionals can use this guide to train themselves and each other to prepare for and conduct olfactory tours.

Contents of this document include:

1. Tips for training tour guides.
2. Instructions for preparing for and conducting olfactory guided tours.
3. Tips on using olfactory storytelling during olfactory guided tours.
4. The do's and don'ts of olfactory guided tours

1. Tips for Training Tour Guides

It is important that the GLAM staff is well informed throughout the development and preparation of an olfactory guided tour. However, it is also crucial that with any olfactory event, tour guides (and other staff members) are trained and prepared for situations that could arise during the tour. For examples of training briefs, see the downloadable tools for this section.

We highly recommend that tour guides are allowed time to conduct test tours. This not only offers them the opportunity to learn how to prepare and use the supplies but it also allows time to experiment with how they will communicate the olfactory narratives and navigate through the space.

2. Instructions for Preparing Supplies

Three distribution methods are helpful for the purpose of Olfactory Guided Tours: hand fans, blotters, and handheld dry diffusers. Below we provide instructions on how to prepare these methods for the use of an olfactory guided tour.

A. Hand Fan Method:

Supply Checklist:

- alcohol-diluted scent(s)
- hand fan
- thick plastic bags
- permanent marker or label maker
- disposable gloves
- tote bag or basket (optional)

Steps:

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1. Put on disposable gloves.
2. Open the fan. Spray six spritzes of diluted smell over the open fan.
3. Close the fan and place it in a plastic bag for storage.
4. Use a permanent marker or label maker to label the plastic bag with the name of the artwork/smell that the fan belongs to.
5. Repeat for each intended smell on the tour.
6. Place the bags of hand fans in a tote bag or basket for carrying during the tour. (optional)
7. While on the guided tour and in front of the chosen artwork, take the corresponding fan out of the plastic bag and unfold it.
8. Ask the group to stand in a semicircle around you (about 1.5 meters away) and waive the fan in the direction of the participants. Occasionally make sure that everyone was able to perceive the smell.
9. The hand fan can be used for more than one tour throughout one day but must be reapplied at the start of a new day of tours.
10. Repeat this for each artwork on the tour.

Considerations:

- ★ When leading a large group (10+), the tour guide should have two scented fans and ask a tour participant to assist them.
- ★ When guiding a larger group, make sure to waft the fan in each section of participants.
- ★ It is crucial that a fragranced fan *always* has its own plastic bag and is never put in the bag of or with another scented fan. If this happens, fans are cross-contaminated and can no longer be used properly.
- ★ Hand fans and their storage bags can be used until they are damaged.

B. Blotter Method

Blotter checklist:

- alcohol-diluted scents
- blotters
- thick plastic bags
- permanent marker or label maker
- disposable gloves
- small trash bag (paper or plastic)

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- tote bag or basket (optional)
- glassine bags (optional)

Directions:

1. Put on disposable gloves.
2. Dip N (the number of participants) blotters into the bottle of diluted scent. Dip carefully but quickly (about 1 second).
3. Place the blotters (of the same smell) in a plastic bag. If using glassine bags, place one blotter in one glassine bag and then into the plastic bag.
4. Use a permanent marker or label maker to label the plastic bag with the name of the artwork/smell that the blotters belong to.
5. Repeat for each intended smell on the tour.
6. Place the bags of blotters in a tote bag or basket for carrying during the tour. (optional)
7. While on the guided tour and in front of the chosen artwork, hand each participant one blotter.
8. Briefly show participants how to use a blotter and always instruct participants to smell with *both* nostrils.
9. After everyone is finished smelling, participants can keep their blotters. For those who do not wish to keep their blotter, offer to collect it with the trash bag.
10. Repeat this for each artwork on the tour.

Considerations:

- ★ Prepare blotters close to the tour itself (within 3 hours).
- ★ Always prepare blotters outside of the galleries.
- ★ Dip only clean blotters into a bottle.
- ★ Multiple blotters can be dipped at once.
- ★ To avoid cross contamination, do not reuse glassine bags.
- ★ To avoid cross contamination, use one storage bag per set of blotters.
- ★ For hygienic purposes, it is recommended to use blotters for only one tour.

C. Handheld Dry Diffuser

Whispi supply checklist:

- undiluted smells (pure oil)
- hand held dry diffuser

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- thick plastic bags
- permanent marker or label maker
- disposable gloves
- pipettes
- tote bag or basket (optional)

Directions for preparing handheld dry diffusers:

1. Put on disposable gloves.
2. Flip the top of the handheld dry diffuser open to expose the scent cell.
3. Add 3 drops (.15ml) of pure oil with a *clean* pipette into the center of the scent cell.
4. Repeat for N (number of participants).
5. Close the top and close the piston.
6. Let stand vertically overnight (at least 8 hours). Do not use the handheld dry diffuser during this time.

Directions for using the Whispi:

1. While on the guided tour and in front of the chosen artwork, hand each participant one handheld dry diffuser.
2. Briefly show participants how to use the handheld dry diffuser. (see steps 3-6)
3. Hold the handheld dry diffuser in both hands, with the piston upwards
4. With the piston in your right hand, rounded side facing you, turn the piston right
5. When the piston is aligned with the raised dot on the body of the handheld dry diffuser, you can let go and the piston will pop up.
6. Put the rounded end close to your nose and pump the piston up and down with your finger to release scented air to your face.
7. After everyone is finished smelling, collect the handheld dry diffusers.
8. Disinfect diffusers with an alcohol wipe and store for the next tour.

Considerations:

- ★ While preparing the diffusers, add only 3 drops to the scent cell to avoid mechanical problems.
- ★ Use only clean pipettes when applying scented oil and do not reuse pipettes.
- ★ Use diffusers for one smell only.

3. Tips for Olfactory Storytelling During Guided Tours

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A. Timing

- Tours should not exceed one hour.
- Typically a tour visiting 5-6 artworks/locations suits
- Make sure the route of the tour is well known by the tour guide and account for walking time between each artwork.
- It is up to the tour guide how and when they present the smell to participants. We have noticed that once smells are presented, groups often focus more on the smells and converse with each other rather than pay attention to the guide.

B. Group Size

- Olfactory guided tours can be bigger or smaller but should not exceed 15 participants.
- The group size informs the best distribution method. For smaller groups (less than 10), the blotter method can be used. For larger groups (10+), the hand fan method is more efficient.

C. Types of Smells

- We recommend using both fragrant and malodorous smells.
- When the tour guide chooses the smells that they will use during the tour, they should balance fragrant and malodorous smells (ex. 3 fragrances, 2 malodours).
- We recommend not to start or end the tour with a malodorous smell.

D. Nose fatigue

Nose fatigue is when it is difficult to smell due to sniffing multiple smells one after the other. There are two options to help this:

1. *coffee beans* which are often used to neutralize the nose in perfume practice, or
2. *yourself*, roll up your sleeve and sniff the inside of your elbow. Tour guides can mention this in advance or throughout the tour.

4. Olfactory Tour Guide Do's and Don'ts

DO

- Before launching the official olfactory tours, do conduct test tours with various audiences or target groups. This helps to better understand the number of smells and which smells work best on your audiences.

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- When presenting a smell to participants, do ask the group to keep reactions to themselves to encourage individual smelling.
- After a few moments of individual smelling, do ask participants to respond freely. Below are a few helpful conversation starters:
 - Is the smell new or have you smelled it before?
 - Does the smell evoke memories, associations, or feelings?
 - Would this smell be indoors or outdoors?
 - What season does the smell go with?
 - Is it something edible?
 - Do you associate a place or person with the smell?
- It can be difficult to put smells into words as we lack olfactory vocabularies. Do help your participants with this process through multisensory vocabularies. You can start from the questions below:
 - Is this a cool or a warm smell?
 - Do you associate the smell with a color?
 - Do you associate the smell with a texture (smooth or rough, sharp or soft)?
 - Can you hear the smell? Is it a soloist or an entire orchestra?
 - Can you eat this smell? Would it be sweet, sour, bitter, spicy, umami?

DON'T:

- Do not wear perfume or scented lotion.
- Do not ask participants questions like, '*can you name this smell?*', '*what do you smell?*' or '*what is the smell?*'. It can be difficult to pinpoint olfactory vocabularies meaning that these questions can cause insecurities.
- Handing out/incorporating smells into storytelling can cause participants to start conversations amongst themselves. If full attention is necessary, do not disburse smells and wait for an opportunity when you can give participants time and space to converse and reflect on what they are smelling.

Sources:

On the distribution of smells in museum olfactory guided tours, see Caro Verbeek, Inger Leemans, and Bernardo Fleming. "[How can scents enhance the impact of guided museum tours? towards an impact approach for olfactory museology.](#)" *The Senses and Society* 17.3 (2022): p. 315-342; For further research and implementation on the use of smells in olfactory guided tours, see Ehrich, Sofia Collette; Leemans, Inger; Odeuropa Deliverable Impact Activities Report Y1, [D7_2_Impact_Activities_Report_Y1.pdf](#)

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odeuropa.eu and Ehrich, Sofia Collette; Leemans, Inger; Odeuropa Deliverable Impact Activities Report Y2. On results from the public questionnaires Odeuropa conducted, see...

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