

Understanding Olfactory Perception and its Significance in The Exploration of Sensescape Scenarios in Asian Cities

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Abstract

Researchers and designers have begun to devote more time and energy to studying urban escape scenarios because they know how important it is to comprehend the complex ways in which people perceive and interact with the built environment. Olfaction, the sense of scent, is an important part of this multimodal experience since it greatly influences how people perceive and engage with the environment. The importance of smell is magnified in Asian urban settings since these places frequently offer a varied and varied sensory landscape, marked by a multitude of environmental, cultural, and gastronomic influences. Architects, urban planners, and legislators may develop more inclusive and responsive natural settings that cater to the multimodal demands of various people by understanding the function of olfactory perception in constructing the sensescape in these cities.

Keywords: *Olfactory Perception, Sensescape, Asian Cities, Smell.*

INTRODUCTION

Investigating escape scenarios in Asian cities is a difficult and multi-faceted undertaking that probes the complex relationship between human experience and the physical environment. Learning about smell and how it affects the sensory environment as a whole is an important part of this investigation. Despite its importance in daily interactions with cities, olfactory perception is sometimes disregarded or undervalued in city planning and design.

As researchers and practitioners alike realize the tremendous impact of ambiance and atmospheric aspects on the lived experience of city inhabitants, the focus on the sensory as an area of action in urban design has attracted increasing attention (Thibaud, 2015). Writing in affective tones and providing urban settings with coherence are crucial elements of this project since they influence people's perceptions and feelings when they are moving through the city (Thibaud, 2015).

An important factor in this investigation is the multisensory aspect of urban perception, which recognizes the intricate interactions between different sensory modalities (Djimantoro, 2018; Spence, 2020). According to Djimantoro (2018), scent in particular has the power to elicit strong emotional reactions and affect how the author perceives their surroundings. For designers and urban planners, the mapping of the "smell space" and the identification of important design elements, such as chemical, emotional, spatial, and temporal factors, offer invaluable insights. (Maggioni et al., 2020).

With a better knowledge of the role smell plays in escape scenario investigation, the author can work to design urban spaces that are more sensitive to the whole human experience. The requirement for a multimodal approach to urban planning is becoming more and more apparent as Asian cities continue to experience extreme expansion and change.

Asian cities are developing and changing at a rate that makes it more and more necessary to use a multimodal approach to urban planning. By appreciating the importance of smell and including it in the investigation of sensescape situations, urban environments that are more conducive to social, cognitive, and emotional well-being can be designed. (Spence, 2020).

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Urban planners and designers may take advantage of people's multimodal perception and the importance of smell to build cities that are enjoyable for all the senses (Djimantoro, 2018; Spence, 2020). Taking a more all-encompassing view of city planning has the potential to improve city living in Asia by making cities more able to adapt to the unique circumstances of their residents.

As one of five primary senses, the "Taste-Smell System" allows to take in information about surroundings. Outperforming all other senses in terms of the variety of physically distinct inputs it can discriminate, the human olfactory system boasts hundreds of various olfactory receptors. As they stroll around a city, they will unavoidably come into contact with air and smells. As a result, olfactory perception is integral to city life. According to Wang et al. (2023), Canadian geographer Porteous initially proposed the idea of a smell's cape in 1985, building on the description of the sound's cape as a cross-field that explores the connection between people, smell, and the environment. Porteous acknowledged the importance of smell as an artistic domain by drawing a parallel between smell and vision. The purpose of a smell cape is to encourage people to record, preserve, revisit, and create a more harmonious olfactory atmosphere while also arousing their olfactory enthusiasm. The idea of a smell cape emphasizes the importance of olfactory experiences in addition to the more conventional visual and auditory aspects of design, which can significantly impact the user experience.

Enhancing Emotional Connection

According to research by Herz, R. S., and Engen, T. (1996), olfactory impressions can elicit strong emotional responses. In response to questions. Scents in public places have the power to evoke a sense of peace, excitement, or nostalgia, drawing people in and making them feel more connected to their environment. Another benefit of common smells is the way they bring people together. According to Aghostin-Sangar (2007), aromatic components in public spaces have the power to spark conversations, unite people, and cultivate a feeling of community via shared experiences. People are more likely to engage with their surroundings and one another when they detect odors in the air.

Cultural and Identity Significance

Aromas are frequently associated with specific places and cultures. Bringing in aromas that are significant to a community's culture is a great way to show pride in its history and culture. For instance, according to Derrett (2003), the scent of indigenous plants or traditional food can help create a feeling of belonging and community. Smells Cape is an important part of cultural tourism. Tourist attractions can create an even greater immersion by showcasing local scents. This allows tourists to interact with the area on a deeper level by their sense of smell. Research on classical gardens has shown that scents have cultural importance and can teach a lot about how to include olfactory landscapes in contemporary garden plans (Chen, Y.; Yuan, 2017). Recognizing the importance of fragrance as a landscape feature, Japan has launched a campaign featuring 100 examples of chosen smellscape. These examples encompass a wide range of aromas, including plant, food, and incense scents (Kawasaki, 2009). The examination of smell capes can help preserve urban culture and foster a sense of belonging among people by shedding light on the important function that different fragrances play in urban culture.

Fostering Well-being and Comfort

The power of pleasant aromas to promote health and relaxation is well-documented. Making use of natural and soothing aromas, such as those found in parks or gardens, can help create a more pleasant and restful ambiance. It is believed that aromatic chemicals have direct mediating effects on the nervous system in multi-sensory environmental interventions. According to Zhang et al. (2023), horticultural therapy incorporates smell cape as a healing factor to promote overall health, which includes mental and physical health, lower agitation behavior, enhanced ability to think, and improved well-being.

Navigation and Spatial Awareness

When it comes to spatial navigation, smells can also be used as distinct markers. Public spaces can be made more logical and easier to navigate by assigning certain odors to different regions or activities. Therefore, incorporating smell capes into public space design enhances the sensory experience by adding depth

and meaning. Building environments that are more inclusive, engaging, and culturally relevant for different cultures requires an appreciation of the role of olfactory sensations in addition to visual and aural aspects. The most common way to gather information about a smell scape is to have a team of investigators go on a "smellwalk," which is when they take a whiff of the air and make notes on what they detect (McLean & K.J 2017). Perceptions models and smell mapping are used to convey the inquiry results, which can be used as an example for urban design. There has been a recent surge of research cases, and the area of research is constantly expanding. Research into the distribution of smells and their impact on cultural tourism has been conducted at the street level in Guangdong and the historic center of Beijing (Feng. et.al, 2017). At the city level, a smellwalk in Kastamonu City revealed the role of smell in societal memory and, ultimately, in urban planning and architecture. The significance of odor perception in one's overall impression of a city is highlighted in the book "Urban Smells Cape," which offers a thorough explanation of how perceive urban odors and the different types of urban odors. Researchers have tried to investigate the influence of odors on architecture, not just in streets as well as urban areas, but also in architectural spaces where olfactory experiences are lacking.

Asian Cultural Backgrounds

Asian Market

Asian Markets has been involved in institution trading and research for more than thirty years. Our well-regarded team of analysts provides innovative ideas in 12 different areas by combining distinct views with corporate and channel ties. Asian markets are characterized by automated, orderly systems devoid of market makers; the main players are individuals, and international investors wield considerable influence. Asian stock markets are characterized by their non-linear behavior, long-range correlations, and potential for multifractal scaling behaviors.

Religious Places

Numerous religions, including Buddhism, Christianity, Confucianism, Hinduism, Islam, Jainism, Judaism, Shinto, Sikhism, Taoism, and Zoroastrianism, originated in Asia, the continent with the greatest population and size. In the area, all major beliefs are practiced, and new variations are always appearing. Asia is renowned for its cultural variety. The two major religions in Asia, Islam and Hinduism, each have between 1.2 and 1.3 billion followers.

Asian Lifestyle

The Asian Society Show is a unique occasion that provides a deep dive into the colorful and culturally diverse South Asian culture. This ground-breaking program promotes cross-cultural dialogue and understanding while simultaneously honoring the best parts of South Asian business, fashion, food, and culture. Enter this magical universe and you'll be taken to a place with mesmerizing performances, mouthwatering scents, and exquisite craftsmanship. Regardless of your interests—food, fashion, business, or art and culture—this event is certain to make an effect on you that you won't soon forget. India's vibrant capital, Delhi, embodies a complex blend of modernity, history, and culture. Its bustling marketplaces, like Chandni Chow K and Connaught Place in particular, are well-known gathering places where antiquated customs and modern trade collide. These marketplaces display India's varied crafts and gastronomic pleasures and provide a sensory feast of colors, scents, and bustling crowds (Sadana, R. 2022). On the other hand, Turkey's markets, such as the vast bazaar in Istanbul, have a distinct charm due to their beautiful ceramics, vibrant textiles, and unique spices that are displayed in their winding alleyways. Here, the energy of a contemporary marketplace blends with age-old trading customs to transport guests into a timeless world of Turkish trade and culture. With breathtaking architecture and relics, Delhi's historical sites and museums, such Humayun's Tomb and the Red Fort, tell the story of the city's illustrious past. These monuments, which capture the magnificence of Mughal as well as British reign, serve as reminders of Delhi's imperial past. In a similar vein, the Topkapi Palace and Hagia Sophia in Istanbul, Turkey, represent centuries of Roman and Ottoman history while exhibiting amazing artistic quality and cultural relevance. Immersion travel experiences entrenched in the past, the present, and the vibrant pulse of their distinct civilizations are available in Delhi and Turkey. Discovering the vibrant markets of Delhi or the historic sites of Turkey offers a trip through time and customs at each location.

enhancing the visitor's comprehension of their distinct cultural environments (SOONTHODU, et al., 2021).

LITERATURE REVIEW

Xiao, J., et al. (2015) examined these tendencies and pointed out the difficulties in smell cape research from three angles: methodology, creative interventions in design and museum practices, and the formulation of odor policies. The following three areas of future research have been proposed for this discipline in response to the highlighted gaps and challenges: research into enhanced building materials, social justice within odor control and management, and smell archives and databases.

Wankhede, K., et al. (2023) stated that an adequate conceptual framework is necessary for the analysis of smells cape about urban transitions because the phenomena are complicated and resist reductionism in pursuit of better understanding. This paper delved into the smell's cape and urban place experience, exploring their interconnections and interdependencies. Smells cape is an understudied intangible component of sensory place experience; this paper used interpretive epistemology from the cognition framework to argue that it plays a crucial role in urban place experience, correlates with and influences urban place liking, and offers clues for theory building regarding the evaluation of smells cape.

Wang, C., et al. (2023) analyzed smells cape in connection to urban transitions requires a suitable conceptual framework due to the complexity and resistance to the reductionism of the phenomenon. Examining the interrelationships and links between smells cape and urban place experience, this study dived into both. This paper examined the intangible aspect of sensory place experience known as the smells cape. It argued that Smells Cape is an important part of the urban place experience, has a correlation with and influence on urban place liking, and provided ideas for how to evaluate Smells Cape. The paper used interpretive epistemology from the cognition framework to support these claims.

Lindborg, P., & Liew, K. (2021) stated that perceived and comprehended odors and fragrances from many sources make up what is known as the smell cape. How realistically can a multimodal, complex, and real-life setting be brought to life through the use of audiovisual information? The authors examined the findings of two research to learn more about smells cape imagination. In the first, fifteen people who were physically present at the market took a sensory tour of seven different areas. Within the second, 53 participants who were able to participate online walked through the same sites that had been recorded using audio and video. For ambient quality, smell source type and strength, and hedonic tone, responses were analyzed using a "smell wheel," evaluations with semantic scales, and free-form verbal annotations. Canonical correlation analysis was used to determine the level of relationship between real and imagined smell capes. It was shown that there was a strong correlation between hedonic tone and the frequency of keywords in free-form annotations. This means that when it comes to smell, it may be possible to accurately identify the source from audiovisual information. However, when participants weren't explicitly instructed to picture scents, there was no statistically significant correlation between their onsite and online assessments of olfactory quality and audiovisual reproductions. review the results in the context of multi-modal association, classification, and olfactory memory retrieval.

Xiao, J. (2018) stated that Smells Cape research is infancy in comparison to other senses, such as temperature, sound, and light. Research into scents and smells may benefit from a literature review since it provides context for the topic and suggests avenues for future study. Smells and their origins, human perceptions, the physical environment, and location context make up the smells cape idea. Next, it takes a look at how smell capes are currently being studied and uses that information to create a research paradigm for integrated smell capes.

Gao, Y.J. et al. (2022) said that the improvement of the living environment through sustainable development is synonymous with the aroma of space. The field of olfactory perception and smell landscape study has a favorable impact on urban planning and landscape architecture, helping to create and optimize distinct urban memories. This study examined the inner ring and six historic districts of Guangzhou, China, and uses a combination of urban smell tracking experiments and Internet social media data analysis to categorize smells in the ancient city core. The research results served as the basis for drawing the smell map, which was then validated for reliability using social data and semantic analysis. By constructing an emotional score heat map of mood and scent in six regions, were able to demonstrate the environmental impact of smell in important

communities. Green urban design thematic routes—sightseeing, cultural, and food routes—are proposed in the study's conclusion. The authors also offer improvement strategies to encourage the integration of smell with urban operation activities and the sustainable development of regional characteristics of urban areas.

Xiao, j. et al. (2020) found that strong emotions and social connotations linked to individuals and locations can be conveyed through scents. Perceptions of smellscape were the subject of this investigation, which used Sheffield Railway Station and Bus Interchange as a case study. People's impressions on the spot were gathered through walk-along interviews. It seeks to comprehend how individuals interpret the feelings evoked by odors in a real-life setting, taking into account both the objective and subjective aspects of the space and environment. Participants' sense-making of smellscape revealed nine perceptual patterns: recognizing, associating, locating, assessing, anticipating, contextualizing, comparing, generalizing, and personalizing. Based on the empirical evidence that maps the interrelationships between locations, emotions, and odors, a perceptual process model has been developed. This paper's results add to what is known about the theoretical basis of "perception" in the smellscape notion. Future planners and designers can use the perceptual process model as a guide for understanding and conveying smell scapes.

Huang, Y., & Yuan, X. (2023) mentioned that the health advantages of aromatic smells for older adults with dementia are being supported by more and more research. Mental and physical health, decreased agitation behavior, enhanced cognitive function, and overall well-being are all components of holistic health outcomes. All three of these components—the individual (dementia patients), their immediate surroundings (garden smellscape), and the therapeutic value of engaging in physical or passive outdoor pursuits—form a rehabilitation model. As a therapeutic element in the garden, the smellscape not only reaps the benefits of research on indoor aromatherapy, but also builds a sensory environment that aids the health and well-being of older adults with dementia by making up for functional impairment, providing activity support, and fostering environmental creation.

Parker, M. et al. (2024) stated that robust scientific techniques are required to discover and describe components of the olfactory component of the human environment, which is essential for culture, society, and heritage. Smellwalks are one example of an innovative methodology that may be used to study and learn more about the olfactory composition of places and locations, often known as a smellscape or an olfactory contextualized landscape. Smellwalks are becoming more popular as an investigative tool, although there is no established protocol for doing them. Variations in group size, methods of walking led by participants vs. researchers, the process of smell walking being reinvented, and theoretical and methodological discussions were among the primary themes that were identified. The author suggested exploring group dynamics, attribute focus, expanding smell walk attribute data beyond typical hedonic attributes, and developing protocols and techniques for multimodal sidewalks. Potential limitations include these areas.

Quercia, D. et al. (2015) found that perceptions of physical locations are greatly impacted by their aromas. Smell is an important but mostly ignored sense by scientists and urban planners due to its difficulty to record and evaluate on a large scale, among other reasons. An urbanite who wrote this paper went on "smell walks" in several cities, exposing people to various smellscape and having them write down their thoughts and feelings about them. This led to the compilation and categorization of terms associated with odor, culminating in the first dictionary of urban odor. This paper investigated the feasibility of accurately mapping city scents using data collected from social media. This is why the author compiled Flickr and Instagram geo-tagged photos and Twitter geo-tagged tweets for the cities of Barcelona and London. Words that are associated with smell can be most effectively grouped into ten distinct types. Further supporting the validity of the study, discovered that certain categories (such as industrial, transportation, and cleaning) correlate with air quality measures set by governments.

Nissin, L. (2022) stated that culture and history have a profound impact on what is perceived as purely physiological phenomena, such as smell. Without delving into the old sensory landscape, understanding of the past will be severely constrained. This research delved into the odorous nuisances in a specific block of Pompeian city (IX,3) and the surrounding area. The author investigated the odors in the region by identifying and charting their origins; specifically, the author zeroed in on those that have been suggested in earlier research

as contributing to the unpleasant aromas associated with historic towns. This research cast doubts on earlier claims that Roman cities were inherently stinky and instead implies that the smellcape of Pompeii's urban core was more subdued and bearable. It turns out that not everyone in Pompeii experienced the same olfactory scene, though, and that social stratification and power dynamics had a role in odor control.

Endreß, S. (2023) mentioned that the investigation and representation of olfactory environments are the main points of this piece. To begin, this article provided a concise overview of the visuality paradigm prevalent in Western countries and the cultural and social importance of smells in the "Western world," particularly in the fields of science and philosophy. Afterward, a theoretical foundation for discussing these unique landscapes is established by incorporating olfactory landscapes into a fundamental social constructivist-phenomenological idea. Also included is a quick rundown of the state of the art in smellscape surveys, with an emphasis on the mapping method developed by Kate McLean and how it compares to the one utilized here. The Christmas scentscape and Christmas markets were the subjects of a master's thesis that developed and tested the method now being offered. There is a comprehensive walkthrough of the smellwalk process and an expanded signature system.

Ling, X. et al. (2022) confirmed that ambient smells affect behaviour, attitude, and health and inform perception. The perceptual experience of urban open space is mostly visual, with few studies exploring smellcapes except for odor pollution's detrimental effects. Thus, urban open space smellcape planning is still limited. Thus, this study examined Kunming's traditional Zhuanxin Market's smellcape. The smell prism approach was used to calculate 200 judges' subjective scent perception ratings, and a hierarchical clustering method was used to classify typical market smellcapes in two years. The smellwalk approach was used to create a sensitivity–coordination matrix incorporating smell combination, smellcape sensitivity, and coordination. The Smellscape has four zones: critical, preserve, secondary improvement, and main improvement. Additionally, smellcape protection, promotion, and management ideas were made. This created an effective smellcape zoning and planning strategy for urban open spaces. This work sheds light on olfactory research for urban perceptual experiences and has crucial implications for safeguarding urban smellcape heritage, generating restorative urban environments, improving urban space quality, and improving living experiences.

Perkins, C., & McLean, K. (2020) found that the sense of smell is under-researched and widely used despite its pervasiveness and strength in understanding the environment. Everyday senses of place are shaped by olfactory geographies, and there is a lot of promise in mapping these perceptions and their effects to uncover previously unknown cultural and societal norms. This chapter provided a flow diagram of potential implementations of scent mapping. In it, by comparing and contrasting various social and bodily ways of "doing smell," investigated the various temporalities linked to smellcape, and recorded the possibilities of various technologies and mobilities for attending to smell. Smell and its connections to other sensory geographies are investigated. It does this by arguing for a multi-sensory approach to everyday methods.

Rice, W. L. (2020) discussed the importance of natural odors, both good and unpleasant, to park and protected area tourism and how these smells should be more carefully considered when designing visitor experiences. For the benefit of future smellcape studies focusing on park and protected area tourism, this article offers four findings drawn from an informal literature survey on the subject. Parks and protected spaces are most appreciated for their natural scents, according to a growing corpus of research. The significance of park smellcape to the tourist experience is highlighted by their iconic nature. Park and protected area tourism is the focus of this article, which synthesizes recent findings in the field of smellcape. Because of its effort to aggregate major trends, it is valuable to both researchers and practitioners in the tourism industry.

Śliwa, M., & Riach, K. (2012) contributed to the expanding canon of work on transition in central and Eastern Europe by delving into how sensory discourse could provide light on the post-socialist experience of city dwellers. Here present the fundamental principles of "geographies of smell" as an approach to research that emphasizes the lived, sensually embodied experience of change, after placing the study within the rich ethnographic legacy of urban transition. This empirical study examined three themes that draw attention to the symbolic and transformational significance of smell in connection to transition, with an emphasis on the meanings linked to and generated by olfactory experience in modern Poland. Current debates about the

geographies of smell are expanded upon when recognizing smell's active role in meaning creation. It is argued that addressing the sensual dimension of the social, which has been neglected, can delve into more complex aspects of urban transition.

Pálsdóttir, A. M et al. (2021) examined how stress-related mental disorder patients perceive, interact, and enjoy garden smellscape during nature-based rehabilitation. Nature fragrances, specifically, have been shown to reduce stress, suggesting a relationship between the two. A 5-year longitudinal case study examined participants' impressions of a garden smellscape after a 12-week nature-based rehabilitation at Alnarp Rehabilitation Garden, Sweden. All subjects received stress-related mental disorder treatment. Data were acquired through retrospective semi-structured individual interviews and analyzed using interpretative phenomenology. The results showed how natural odor-evoked associations, emotions, and physical reactions and how it stimulated sensory awareness and memory. The smell of plants, especially pelargonium, may reduce stress and aid mental recuperation in real life. The study's findings were useful for nature-based therapy developers and horticultural sector stakeholders.

Xiao, J. et al. (2018) mentioned that Smellscape is gaining attention across disciplines. However, limited research provides a model to understand smellscape perception. This article examined markers of smellscape pleasantness in a selected example using pleasantness as a perceptual quality factor. The natural language of people was employed to comprehend their perceptions. A selected case was studied using Grounded Theory. Semi-structured interviews attracted 19 smell walkers. Participants' descriptions revealed nine smellscape pleasantness indicators: cleanliness, preference, appropriateness, naturalness, freshness, familiarity, serenity, intensity, and purity. Four dominant determinants of pleasantness were preference, healthiness, memories and habituation, and context. A perceptual model based on indicators can classify smellscape by dominating perceptual aspects and scoring pleasantness.

Smellscape Today and Further Development of Existing Concepts

The still-young field of smellscape research and mapping is gradually coming to a close and starting to experiment. It should be noted that French cultural geographers talked about the geography of odors presently in the late 1940s (Dodt et al. 2017), but new methods were tried and improved upon since the research of olfactory stimuli entered the geographical discussion in the 1980s and 1990s (Dodt et al. 2017) and Porteous first introduced the concept of smellscape. Included at the top of this list are the groundbreaking and ongoing contributions of researchers like Henshaw (2014) and McLean (McLean 2016, 2017, 2019, 2020; Perkins and McLean 2020, to name a few). Nonetheless, it is also obvious that this area of study is only just starting. No standard procedures for the gathering or production of smellscapes have been established as of yet. At the moment, the subject was more of an experimental phase, wherein many methods are rethought, combined, refined, and ultimately abandoned.

Dodt et al. (2017) note that there were two main categories of approaches used to study olfactory circumstances, such as landscapes: indirect and direct. Literary works that use the sense of smell are the mainstay of indirect survey methodologies. This area takes into account all forms of literature, including nonfiction, fiction, travel guides, memoirs, and, more recently, social media contributions (Dodt et al. 2017). This means that a travel blog can provide insight into feelings of smell, such as the aroma of lavender while pedaling through Provence (Englin 2019). Scenic olfactory settings, such as the "stinking" Paris of the 18th century depicted in "Das Parfum" by Süskind (2006). we're not typically dealing with olfactory landscapes that have been carefully surveyed; rather, what we're seeing here are reflections of individual experiences, perceptions, and clichés, which are occasionally connected to the study. Because of this, it's not surprising that Dodt and colleagues note that this kind of olfactory survey has limited utility when trying to recreate olfactory environments. But they also point out that these sources help imagine possible olfactory landscapes from the past, particularly from older texts, which let compare and contrast them with the present-day olfactory world (Dodt et al. 2017).

On the other hand, some ways aim to methodically collect odors through direct surveys or olfactory landscapes, and there are a range of approaches that could work here as well. Various quantitative studies can be described

as a positivistic method; these surveys aim to measure the concentration and dispersion of scents. Technical sensory measurements provide the opportunity to assess the concentration of molecules related to smell in this context (Dodt et al. 2017). Odors often comprise hundreds of distinct compounds, which makes them extremely complex and causes these systems to rapidly exceed their limits. Because people's (sometimes highly subjective) olfactory impressions cannot be correctly deduced from these measurements, there is also an issue with the scents' interpretability. One approach to this issue is human-sensory measurement methods, which involve measuring with people's noses. Regarding different types of measurement specifications, Dodt and colleagues demonstrate that they can be structured and standardized to allow for the maximum level of objectivity, even while studying subjective objects (Dodt et al. 2017). Since this study and its findings are also part of this group, quickly went over the more subjective, less standardized techniques.

To begin, the inquiry and resulting growth of the proposed smellscape methodology necessitate an explanation of the epistemological approach that was employed. While it is possible to take a positivist stance toward olfactory landscapes, doing so has its limits, particularly when studying how humans perceive olfactory landscapes. Below, should provide a quick explanation of these limits. It remains with a purely chemical examination of the components that produce odors, on the one hand, and the measurement challenge, discussed earlier, on the other. It is very difficult to quantitatively survey odors in a way that allows to draw deeper insights into how individuals perceive odors. Several elements contribute to this interpretation challenge (Endreß 2022): Factors that influence how people perceive and interpret odor impressions include bodily peculiarities, the environment and weather in which the odor occurs, and the social and cultural background of the smelling person. For more details on this topic, see, for example, Classen 1993; Classen et al. 1994; Endreß 2022; Raab 1998. All of these elements, however, are beyond the scope of quantitative molecular composition measurement techniques. Furthermore, Raab argues that it is clear that in the olfactory field, there are no systematic classification points that allow for the ordering of subjective scent qualities, and there are no discernible relationships between the chemical-physical properties of flavors and their sensations (Raab 1998). According to Eberle, one must rely on people's subjective perceptions while studying odors since there is no scientifically justified, objective, systematic classification of smells (Eberle 2021).

It is now crystal evident that a phenomenological-social constructivist paradigm is the way to go for studying olfactory environments from the perspective of how people perceive them. Here, then, build on what Henshaw and McLean have done before (Henshaw 2014; McLean 2016, 2017, 2019, 2020; Perkins and McLean 2020) to explain olfactory landscapes. According to McLean (2016), these representations highlight the transient sense of space and center on the individual's subjective experience. The geographical preparation of the smellscapes under study reflects this perspective, which was further upon in the aforementioned master's thesis on the chemical environment of Christmas, specifically Christmas markets (cf. Endreß, 2022). Because of this, the object of one's sense of smell becomes the center of attention. In the opinion of Bischof, the olfactory region exists for the one who perceives precisely when an odor is sniffed or a personal impression is felt, therefore the smell doesn't originate from somewhere other than the person experiencing it (Bischof 2007). This method similarly avoids using generic terms to describe fragrances; instead, it centers on the personal associations that people have when they smell a certain scent. Another perk is that smell-descriptive language is severely lacking, if not nonexistent, in the so-called "Western world" (Bischof 2007). So, according to Raab, when people describe the odors, they primarily use "external" characterizations, metaphors, circumlocutions, or allude to where the smells came from (Raab 1998). No one ever uses adjectives like "salty" or "spicy" to describe the aromas of a Christmas market, for instance (Endreß 2022). On the contrary, individuals tend to focus on things like cigarette smoke, sausage, or hedgehogs as potential odor sources (Endreß 2022). Referring back to the original descriptions allows for an immediate connection of the smells' interpretation and also makes it easier to explain the findings to others who aren't specialists in the field, as these terms are easier to understand than the specialized jargon used by wine and perfume experts. Additional odor signatures were created for use in mapping them. (See Fig. 1).

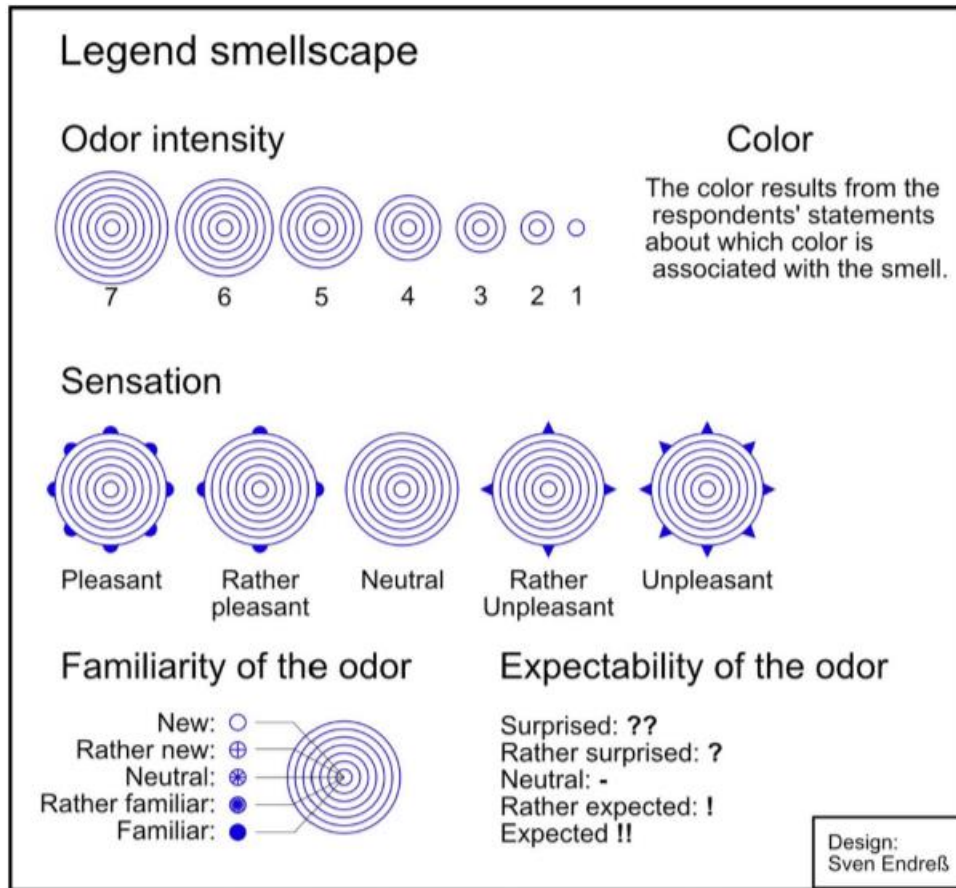


Figure 1 Legend Smellscape

DISCUSSION

A multifaceted dataset is created by the fact that people's olfactory perceptions are individually, socially, and culturally situated.

Individual Factors: How perceive odors is influenced by traits. When compared to males, females are better at using their sense of smell. The ability to smell declines with age; in fact, half of the population has a significant decline in olfactory function after the age of 65. The ability to detect odors is further diminished by smoking (Venne-mann et al., 2008).

Socio-Cultural Factors: An effort to model the spectrum of backdrop and episodic scents sensed and reported is made by urban odor categorization. This is by no means an all-inclusive list, though; cities in regions of the globe experiencing extremely humid or cold climates are likely to have their unique aromas that do not fit northern European-based categories. Still, it's important to note that the great majority of cities would have at least one of the odor groups listed. Food, garbage, and building supplies will always be available in densely inhabited places.

Contextual Factors: The city's odor-detecting system is heavily influenced by urban design and the city's structure. For instance, New York City's grid structure promotes large-scale communal olfactory experiences due to its architectural intention of utilizing prevailing westerly winds to disperse miasmas, which were disease-carrying clouds that formed in the late 18th century. Throughout the city, a sweet, syrupy odor was noticed in October 2005. Even though it had a lovely aroma (think sweet maple syrup and caramel), hundreds of people contacted the city's emergency services because of it. 'In a city plagued by terrorist attacks, the scent of grandma's cooking not only brought back fond childhood memories, but it also sparked unfounded fears of an

impending attack. In addition, air temperature has a direct impact on the intensity and volatility of odors, and distant communication smell detection is very time-dependent, reliant on things like weather, patterns of wind, and seasonal activity waves. The same street in a city that never sleeps will play host to a wide variety of activities throughout the day, from the cafe or retail culture in the morning to the culture of drinking in the evening. Both an Asian market and an Asian religious site provide sensory experiences that are rich and immersive, appealing to all the senses in their own distinctive and lively ways.

Asian Market Sensory Experience

The market is a veritable rainbow of color, from the spices, fruits, and veggies to the fabrics sold there. Each booth tells a tale thanks to the elaborate décor and multilingual placards. Traditional music fills the air as merchants scream out prices, customers haggle, cutlery clinking, food sizzling, and the market comes to life. The air is thick with the enticing odors of herbs, spices, newly prepared food, incense from neighboring temples, and market-fresh vegetables. One can expect a riot of taste profiles when they sample street cuisine, from spicy to sweet to sour to savory, all while quenching their thirst with exotic fruits and cold beverages. Interacting with woven baskets, polished wood, heated dishes, and fabric textures is all part of the tactile experience, as does navigating among throngs of people.

Religious Place Sensory Experience

Spectacular altars, multicoloured paintings, and meticulously sculpted sculptures are commonplace in religious buildings. Light and incense smoke create a harmonious atmosphere. Whispered prayers, rhythmic chanting, and the tolling of bells fill the air, creating an aura of respect and spiritual connectedness. Aromatic fragrances, flower offerings, cleansing incense, and the earthy tones of wood and stone fill the air, making for a peaceful and uplifting atmosphere. As part of religious ceremonies, participants may deepen their sensory connection with the divine by tasting symbolic meals or beverages, which serve as a bridge between cultural and religious traditions. Sacred artefacts, such as prayer beads, ceremonial tools, and stone sculptures, are thought to evoke blessings and heighten spiritual participation via tactile contact.

Both settings provide a sensory feast and a window into Asian culture and spirituality but in their special ways.

CONCLUSION

Since smell has such a profound impact on cultural and sensory experiences, it is essential to comprehend olfactory perception in order to investigate sensescape situations in Asian urban centers. An entrancing olfactory scene reflecting the region's rich culinary traditions is created in the bustling Asian marketplaces by the mixing scents of spices, fresh vegetables, and street food. Sacred spaces provide a unique sensory experience via the uplifting aromas of flower offerings, incense, and fragrant oils, which aid in contemplation and prayer. Urban areas in Asia rely heavily on these unique olfactory clues as part of their sensory environment for everyday living and cultural customs. Investigating these varied sensescapes reveals fascinating facts about the history, culture, and ecology of Asian cities, highlighting the significance of smell in understanding and enjoying these places for what they are.

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