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- Track: Sensing Spaces
- Theme Emplacing the Public

Title

Towards a sensory-emotional framework for design and management practices to cultivate a greater sense of connectedness in public environments.

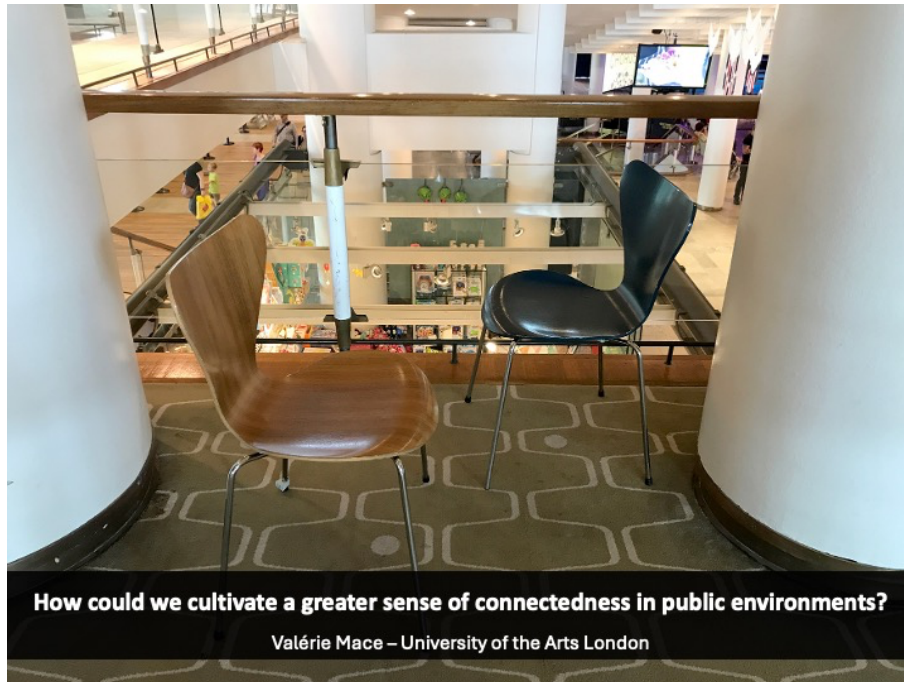
Abstract

This presentation articulates insights from an investigation into the personalisation of experience in the public interior to uncover principles that can contribute to the visitor emotional attachment to place. The research posits that catering for a multiplicity of sensory and emotional needs can foster a greater sense of connectedness and belonging. To support this perspective, insights are synthesised into a sensory-emotional framework for design and management practices to cultivate a diversity of people and activities, individual and collective wellbeing.

The methodology is rooted in the paradigm of embodiment to explore the visitor situated experience of personalisation analysed in two dimensions: personalisation for visitors, the way the interior is designed and managed, and personalisation by visitors, the way they engage with the environment to enact their preferred activities. Personalisation for and personalisation by are treated as complementary and interdependent.

The sensory-emotional framework developed through this research can deepen our understanding of qualitative practices at the intersection of physical space and lived experiences, to contribute to the creation of public environments that are inclusive, welcoming and sustaining but also stimulating, enjoyable and fun, making daily life more rewarding and connected.

Introduction



Slide 1: Interior view from Level 3 at the Royal Festival Hall, London

This project investigates the personalisation of the visitor experience in the public interior to uncover principles that can contribute to emotional attachment to place. I was interested in deepening our understanding of qualitative practices bringing together physical space and lived experiences towards the creation of environments that are inclusive, welcoming and sustaining but also stimulating, enjoyable and fun.

This research centres specifically on studying the conditions for successful relations between body and environment. In its broadest sense, the question that I am asking is: How could we cultivate sensory-emotional connectedness in public environments? I also developed a framework for others interested in similar qualitative practices to draw on. It is this framework that I would like to introduce and present today. But first I will briefly outline why I selected the public interior for this study.

The public interior

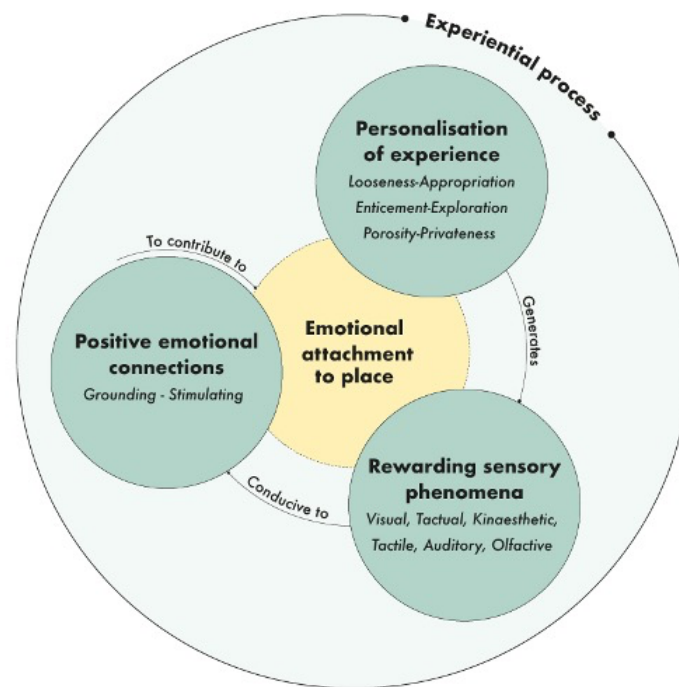


Slide 2: Interior view of the Riverside Café on Level 2 at the Royal Festival Hall, London

Public spaces are an essential part of the collective environments that constitute our experience of the city. They contribute to the health, wellbeing and vitality of its inhabitants because the quality of the public realm shapes our experience of place and in doing so, can influence social cohesion. This understanding opened a space for me to explore synergies between individual and collective experiences, and I chose the public interior because it has not received as much attention in research as public exterior spaces. Thus, even though the methodology that I used in this project is rooted in the paradigm of embodiment, placing the sensing body as the primary means of perception, this research is not simply about being in a space as an individual but also about being with others within it. It is as much about the collective experience, the macro-scale of the environment, as it is about the micro-scale of the individual.

Following a comparative study of public interiors, I selected the Royal Festival Hall for the fieldwork. It is a well-known cultural venue and public interior in London, UK. It rated the highest level of publicness and as such, presented an environment with a rich palette of phenomena for me to explore. The following sections introduce key components of the framework to illustrate ways in which to cultivate sensory-emotional connectedness.

The experiential process

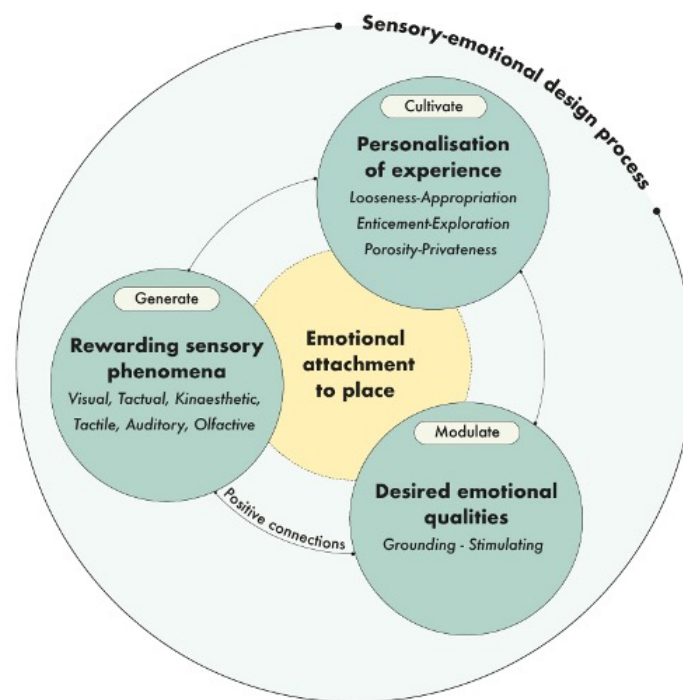


Slide 3: synthesis of the experiential process

As I identified a site for the fieldwork, I also needed to define the boundaries of the study and therefore, a suitable experiential context. This became the personalisation of the visitor experience, which I defined as a visitor centred approach to designing and managing public interiors that caters for a diversity of people and activities. I drew on the writings of Irina Kuksa and Tom Fisher (2017) to differentiate between personalisation for a person and personalisation by a person. In my study, 'personalisation for visitors' relates to the way the public interior is designed and to the management of the visitor experience. 'Personalisation by visitors' refers to the way they engage with the environment to enact their preferred activities. I also identified a lineage concerning the relationship between the personalisation of experience and emotional attachment to place from the private to public interior. Ali Madanipour (2003) explains that a home is a place personalised by its inhabitants to reflect their identity, a place where territories are formed, a place that provides physical and psychological shelter and comfort, a place for self-expression and autonomy. Then, expanding on this understanding, Alison Blunt and Robyn Dowling (2006) highlighted that such attributes have also in more recent times become associated with places outside private dwellings, places that may be public. This is about public spaces where people may feel 'at home'.

Through this research, I uncovered an experiential process, and this constitutes the first section of the framework. This experiential process can be explained in the following way. The personalisation of experience, when applied to the context of the public interior, can generate rewarding sensory phenomena conducive to visitors' ability to develop positive emotional connections with their environment. The notion of reward is essential since we are looking to cultivate positive connections. We have spatio-sensory phenomena generated through design and management interventions. Materials for instance can be selected for their pleasant tactile and olfactive properties. We also have socio-sensory phenomena, those generated by people's actions and interactions. For example, conversations can generate convivial auditory phenomena. Then, as significant experiences are retained as mental images, their cumulative effect over time can deepen connections between visitors and the environment, to develop into more intimate forms of emotional attachment to place. So, this experiential process is structured across four interrelated concepts: experience, rewards, connection, attachment.

The sensory-emotional process

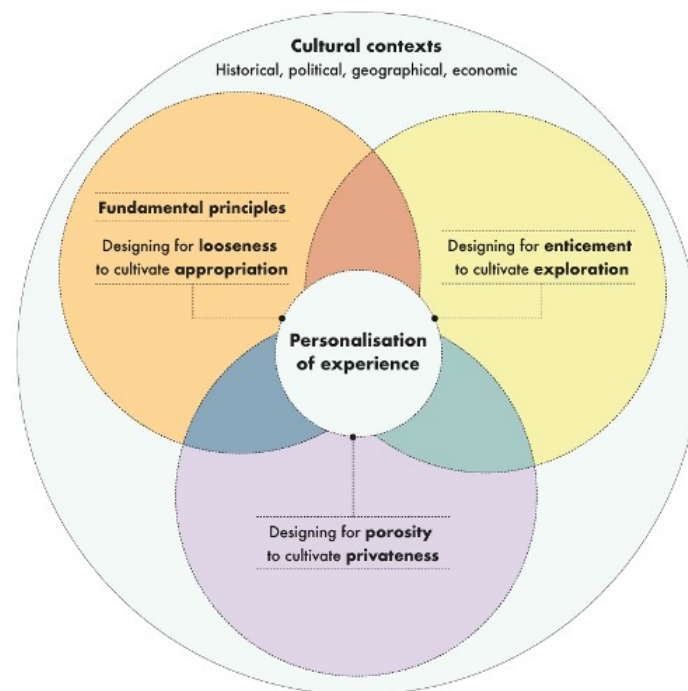


Slide 4: synthesis of the sensory-emotional design process

This is then transposed into a sensory-emotional design process defined by three interrelated components - Cultivate, Modulate, Generate. Before I explain these in more details, I would like to draw attention to the integration of management practices alongside design. Although this study

initially intended to focus on design, I realised that I could not disassociate the design of the interior spaces from the management of the visitor experience. This framework recognises this interdependence, and aside from the organisation of spaces and their public access, the management of the visitor experience includes the management of safety and respect for others, and the way the varied and potentially conflicting needs of visitors are catered for.

Cultivate



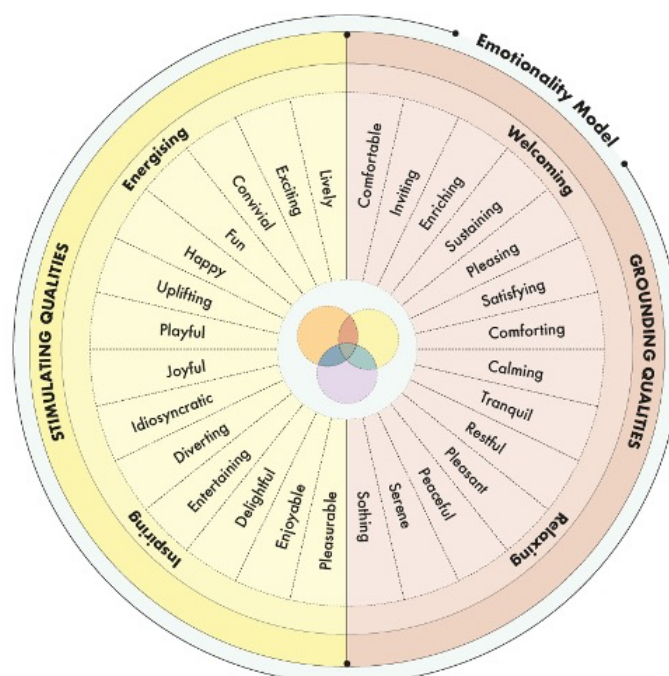
Slide 5: synthesis of the principles pertaining to the personalisation of experience for this study

‘Cultivate’ relates to a complementarity and interdependence between personalisation for and personalisation by. In the context of this study, it is structured by three pairs of principles: looseness and appropriation, enticement and exploration, porosity and privateness. Looseness, enticement and porosity can be designed and managed to cultivate visitors’ ability to enact appropriation, exploration and privateness respectively. The characteristics of looseness include openness, generosity and flexibility. Openness refers to the permeability of the environment. Generosity, to the provision of space or furniture and to a degree of tolerance from management for visitors to enact their preferred activities. Flexibility refers to people’s ability to rearrange elements to suit their needs. These characteristics can cultivate visitors’ ability to enact a relative autonomy and self-expression, which were identified as key attributes of personalisation in the home. In turn, this can

contribute to a diversity of people and activities, bringing life to the public interior and cultivating visitors' ability to experience the public interior as a 'home away from home'.

Enticement is about arousing curiosity and inviting touch for people to explore the environment and actively use their body to engage with it, to move, meander, look, listen, sit, lean, touch, grab, hold, inhale, and so on. Porosity refers to the way solid boundaries such as walls, porous edges such as windows and sensory thresholds, such as transitions from lightness to dimness, regulate sensory flows. These are the phenomena perceived through sight, hearing, smell and passive touch that flow through a space. They can cultivate visitors' ability to enact privateness, which is not privacy but a form of positive territoriality in which people define personal or group territories in the micro-scale of the body. Because of sensory flows, these territories become vantage points from which visitors can maintain sensory connections with the macro-scale of the physical environment and its social life. They are still part of the life of the public interior even though they may not actively participate in it. This can help them feel comfortable, safe and sustained. In addition, this section of the framework includes a matrix to identify ways in which historical legacies, political governance, geographical location and economic and financial health can impact design and management practices.

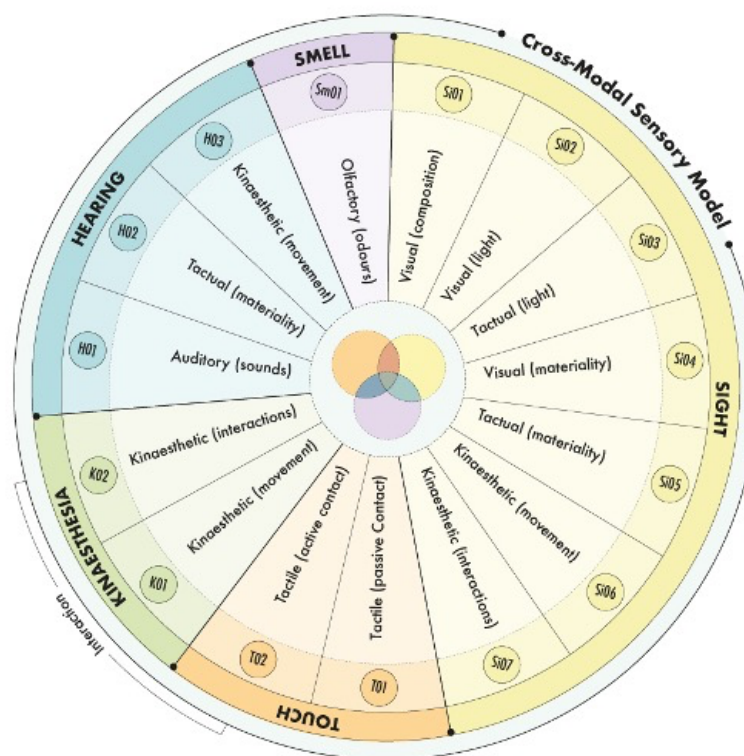
Modulate



Slide 6: element of the emotionality model

The next stage of the process, modulate, invites designers and managers to consider the emotional tone of the environment across space and time. Across space because a building may be composed of different spaces with variations in attributes. Across time because the emotional tone of the physical and social environments can also shift depending on the time of day, week, month or year. The framework includes matrices designed to help modulate these variations. However, it is important to stress that this is not about predicting people's emotional state, that is not possible. It is about considering what would it be like for visitors to inhabit and experience the environment in which they are situated. This is about understanding how emotionality could permeate environmental experience as designed elements and human activities engage the senses and define the emotional tone of a space. Here, emotionality is structured across two dimensions. I was inspired by James Russell's (1980) Circumplex model of affect and the writings of Charles Rice (2007). In this model, qualities in the environment can be perceived emotionally as either grounding or stimulating. Grounding qualities are linked to familiarity, continuity and stability. Stimulating qualities are linked to momentary and dynamic experiences. This research showed that we need both to make daily life more rewarding and more connected.

Generate



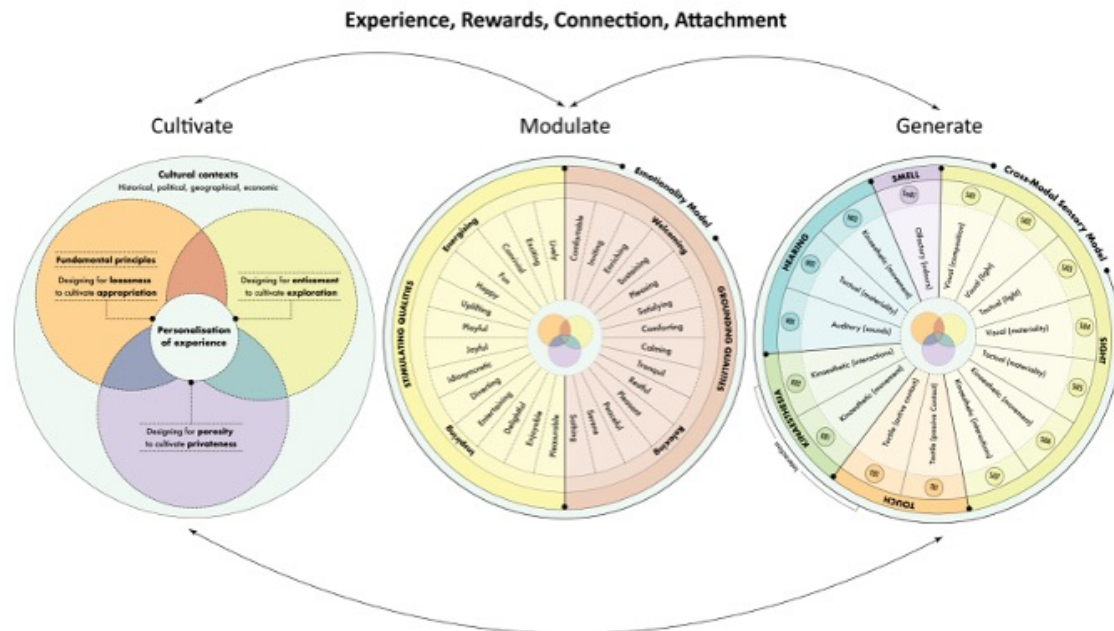
Slide 7: element of the sensory model

Then, the question becomes how could the personalisation of experience generate rewarding sensory phenomena conducive to visitors' ability to develop positive emotional connections with their environment? For this, I developed a sensory model complemented by an extensive library of phenomena with corresponding value scales to reflect their qualitative attributes. Examples of value scales include the degree of sharpness to smoothness in contour identify, or the degree of warmth to coolness in colour temperature. The model also foregrounds the cross-modality of the senses, when sensory phenomena associated with one modality can be perceived through another. For example, phenomena associated with touch can also be perceived through sight. This is often defined as haptic sight although in this model, I prefer to use the word 'tactual' to maintain a more obvious connection with 'tactile', used in relation to touch.

I am also interested in lesser known (or less discussed) cross-modalities. For example, it is possible to perceive kinaesthetic phenomena through sight when observing the movement, postures, spatial and social gestures of others. I found that seeing people slowly meandering through a space, or leaning back on a sofa, can contribute to the perception of relaxation and comfort in the observer and through social contagion, even induce the observer to perform similar actions. Phenomena associated with touch and kinaesthesia can also be perceived through hearing. For example, the sound of someone walking will be perceived differently kinaesthetically to the sound of someone running and again we go back to the interrelation between people and environment because in this example, the materiality of the space will have a significant impact on the quality of the sound. It is also possible to perceive the weight of a door from the sound it makes as it closes, and this example calls to mind the intermodal perception between exteroceptive tactile sensations and interoceptive muscle sensations. This model also opens a window into the way touch and muscle sensation interrelate.

As with other models, the separation of modalities into categories is necessary but artificial, only serving the purpose of organising information. Sight dominates this model, occupying almost half the wheel. This is consistent with the understanding that vision is our most dominant sense, but this is also because in this study cross-modality is most prominent in sight. I chose to place the modality smell at the top of the model to help alleviate this ascendancy, whilst the circular design serves to minimise issues of hierarchy. It conveys the notion that in bodily experiences, the senses interrelate and work in unison, and that experience is a flow and always multisensory.

Conclusion



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Slide 8: overview of the structure of the sensory-emotional framework

This framework articulates for the first time an explicit path to follow, to imagine or re-imagine everyday experiences by amplifying the role of personalisation, sensing and emotionality in the creation of welcoming and sustaining public interiors. It contributes an approach that brings space and people, spatio and socio-sensory phenomena together into one integrated process to foster sensory-emotional connectedness. I envisage that this contribution could extend beyond the context of the public interior into the public realm more broadly.

I also carried out design experiments with participants to test the usability, transferability and value of key principles in this framework. I see these as a foundation for the development of new activities to test its design with more precision than the experiments could provide because I would like to articulate this framework into a guide for designers, managers or researchers, to draw on. In its present form, the framework also presents a starting point for developments that reflect the needs

of a more diverse population and specialist communities. So even though this framework is substantial, there are still ways in which this research could develop and expand.

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