# Art-based heuristics for spatial inquiry and design: Insights from *The Sensitive City* project

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**Abstract**: This paper explores the use of art as a heuristic tool for understanding and designing urban spaces, drawing on sensory and phenomenological insights in urban studies. The main research question of the paper is: How can the arts contribute to developing a new "sensitive approach" that enhances current practices of spatial enquiry and place-making? Methodologically, the paper is based on a critical review of the literature and empirical investigations. In particular, it focuses on the project *The Sensitive City*, an initiative linked to an architectural residency hosted by the research centre *ARCAM*, in Amsterdam. In this context, artistic practices were employed as exploratory and interpretive tools to reveal non-immediate qualities of two distinct urban places: *Havenstad*, a transforming harbour in the northern area of the city, and *Mercatorplein*, a socially vibrant urban plaza. The discussion highlights how the arts can reintroduce creative thinking and innovation in a non-instrumental way. Rather than prescribing specific aesthetic canons or serving the targeted aims of civic or cooperative place-making, and in contrast to dominant data-oriented approaches to spatial enquiry, the arts offer a means of engaging with urban space through open-ended, sensorial, and imaginative processes.

## 1. Introduction

Many authors have pointed out the importance of having a more "sensitive" approach in spatial enquiry and place-making. However, there is no agreed definition of what "sensitive" means, or in which contexts this kind of approach is most needed or effective. One interpretation is that of sensory urbanism, which recognises the fundamental role that the senses play in the appreciation and experience of the built environment (Adams et al., 2009; De Franco & Moroni, 2023; Di Croce, 2025). In this case, advocating for more "sensitive approaches" can be motivated by environmental or ecological concerns, fostering specific urban solutions – for instance, those aimed at increasing urban biodiversity (Ferguson et al., 2013; Ikin et al., 2015). Another line of interpretation relates to social sensibility, which draws attention to social and cultural issues, including those of socio-spatial justice, social identity and change (Capon & Dixon, 2007; Häusler & Häusler, 2024; Queirós & Lages, 2024). Moreover, the term "sensitive" can refer to the concept of value-sensitive design, which has gained significant traction in both scholarly and practical debates, aiming to inspire a broader and more enriching understanding of social participation and engagement (see Wallin & Horelli, 2010; Friedman & Henry, 2019; Ietto et al., 2023). These debates are particularly focused on delivering tangible solutions (Ikin et al., 2015; Kirk et al., 2021; Wu et al., 2021).

In this paper, an alternative "sensitive approach" is explored; one that is grounded in and sustained by the arts, not so much to solve certain problems as to raise new ones. Specifically, artistic practices are regarded as heuristic methods: acts that help to generate valuable insights under conditions of limited time and information (Gigerenzer et al., 2011). Recognising cities as complex systems, artbased heuristics can contribute to advancing new forms of knowledge about urban places that go beyond strictly rational or predetermined objectives (Escobar, 2014). To explore these dimensions, the paper focuses on the activities undertaken during an artistic/architectural residency hosted by a research centre in Amsterdam (i.e. ARCAM) and on a project titled The Sensitive City. This multidisciplinary initiative brought together artists and non-artists, practitioners, theorists, and ordinary citizens to investigate how the arts can foster new understandings of the non-immediate, sensory qualities of particular urban places and, conversely, to inspire novel ways of enhancing their physical form in a non-instrumental fashion. This paper argues that artistic practices should be more widely recognised as essential cognitive tools (Kim et al., 2020), proposing a sensitive exploration of local geographies, as a counterpoint to today's predominantly data-driven approaches. The underlying assumption is that urban design often lacks sensitivity, both in its processes and in its understanding. In the past, research preceding design was more in-depth – as in the Amsterdam School (part of international Expressionist architecture, 1910–1930, in the Netherlands) – which integrated arts and crafts into the very core of design practice. Today, we can revisit this tradition, viewing the arts not as mere "accessories" to design, but as tools for exploration and intervention in their own right. While the application of "sensitive approaches" in design practices remains effective in lowering both real and perceived barriers (Fredman & Hendry, 2019), these approaches tend to remain closely tied to rational or utilitarian logics (e.g. increasing consensus, user numbers, or uptake of certain products, services, or processes). As will be explained, the "sensitive approach" presented here positions art as a method of discovery, and artistic creations as means of providing symbolic cues, emotional resonance, and recognisable patterns within the exploratory process, without necessarily prescribing a specific state of affairs.

In terms of methodology, the paper is based on a critical review of the literature and on empirical investigations conducted through *The Sensitive City* project (e.g. urban walks, experiments, on-the-spot observations, and artistic performances). In terms of structure, the paper is divided as follows. The next section outlines the theoretical background of art-based heuristic approaches in urban enquiry (§ 2), followed by a description of the empirical experiments carried out within *The Sensitive City* project (§ 3). A final discussion and concluding remarks end the work (§ 4).

# 2. The role of the arts in spatial enquiry and place-making

Senses play a fundamental role in the appreciation and experience of the built environment. Sensory perceptions, however, are susceptible to cultural variations (Classen, 1993/2023), and most of the senses contributing to knowledge acquisition are non-visual in nature (Loisel, 2021). Important developments in the fields of cognitive science, environmental psychology, and phenomenology – particularly through concepts such as embodied cognition (Merleau-Ponty, 1962/1942) and environmental affordances (Gibson, 1979) – suggest a shift in our descriptive aims, calling for an expanded scope of investigation. This is especially relevant in architectural and urban design practice (Jivén & Larkham, 2003; Matos Wunderlich, 2008; Mallgrave, 2013; Pallasmaa, 2015), but also in aesthetic theories of urban atmospheres (Edensor & Sumartojo, 2015; Gandy, 2017; Canepa et al., 2019; Di Croce, 2025). These developments testify to a growing awareness of the complexity of information that the external (urban) world provides. Nonetheless, a persistent tendency to preserve a certain degree of rationalism in research methods continues to constrain their scope (Hay, 1998). In the context of spatial enquiry, conducting experiments (whether outdoors, but more often indoors) to capture the brain's responses to specific environmental stimuli reveals only a fragment (perhaps a very small, strictly computational one) of the full range of experiences, emotions, and sensations that a place may offer its users. At the same time, on a practical level, decision-making processes, preferences, and forms of appreciation do not depend solely on what is empirically accessible to the body (an implicitly ableist stance), but also on what is epistemically conceivable to the mind (a more possibilist orientation). As highlighted by Bachelard (1969), Relph (1976), Buttimer (1980), and Montgomery (1998), there is deep gratification to be found in the open-ended experiences that the built environment affords its "sensible" observers – even through pure wonder and imagination. The great dynamism, instability and non-linearity characterising urban experiences (Matos Wunderlich, 2008; Porqueddu, 2015, 2018; Haken & Portugali, 2021) make urban users constantly negotiate with empirical complexity (Buttimer, 1976; De Franco, 2023). Thus, for many urban users, the problem is not expanding the already wide and rich set of local information (de Roo, 2018) but having space to detach from (or subvert) reality as it is and play with imagination. In this latter sense, urban planning debates often consult the world of the arts in various ways. Let us first consider, for instance, the use of the arts for metaphors, as in the case of Jane Jacobs (1961) and her famous claim that the city is not a "work of art". This statement is often discussed by both conservationists and interventionists in the built environment (Cozzolino, 2015; Ikeda, 2020), but this does not mean that the arts should be dismissed entirely in her original view of the city. In her words:

"Under the seeming disorder of the old city, wherever the old city is working successfully, is a marvellous order for maintaining the safety of the streets and the freedom of the city. It is a complex order. Its essence is intricacy of sidewalk use, bringing with it a constant succession of eyes. This order is all composed of movement and change, and although it is life, not art, we may fancifully call it the art form of the city and liken it to the dance – not to a simple-minded precision dance with everyone kicking up at the same time, twirling in unison and bowing off en masse, but to an intricate ballet in which the individual dancers and ensembles all have distinctive parts which miraculously reinforce each other and compose an orderly whole. The ballet of the good city sidewalk never repeats itself from place to place, and in any one place is always replete with new improvisations" (Jacobs, 1961: 50).

The original point here is using art metaphors not to impose or consolidate certain canons; it is rather the opposite: to emancipate from prescribed focuses of appreciation – something perhaps different from the situationism of Guy Debord or the idea of the city as an *oeuvre* by Henri Lefebvre. A second way in which urban design engages with the arts is by treating artistic practices as "indicators" of certain values, attitudes, or lifestyles emerging within specific urban contexts. Consider, for instance, street-art performances (e.g. square dancing), and how these may be interpreted by scholars either as impediments to or as facilitators of gentrification (compare, among others, Gutiérrez & Torma, 2020; Xiao et al., 2020; and Guzzanti & D'Arcy, 2023). A third approach involves using the arts as "magnifiers" to stimulate agency and engagement among specific stakeholders – through user-friendly participatory methods, aesthetic rhetoric, or event-based interactions – within the broader framework of cultural planning (Rivkin-Fish, 2004; Palermo & Ponzini, 2014; Redaelli & Stevenson, 2022). A fourth way considers the arts or creativity as the "driver" or motivating force behind certain urban transformations, as seen in the paradigms of the "creative city" or "cultural city" (see, e.g. Markusen, 2006).

Many of these approaches, however, give the impression that the arts are treated as a medium like any other. There is a notable degree of "functional subordination" of the arts in their mainstream applications within place-making strategies. Consider, for instance, the financial burdens artists face in maintaining their activities in urban environments – unless they align with specific public programmes or policies – and the paradox of developing "plans" for arts expansion or establishing "creative districts" through top-down technical or political decisions (compare Nuccio & Ponzini, 2017; Kortbek, 2019; Redaelli & Stevenson, 2022). It is largely agreed that the arts can expand human capacities such as agency, memory and imagination, the objective, however, is not only to use the arts to reveal what is concealed but also to view the arts as a means of introducing what is yet to be conceived. In this sense, urban art residencies in cities are increasingly recognised as valuable tools for inspiring new approaches in place-making and urban policy innovation (Kang, 2018; Sarrouj, 2022). A common denominator among these initiatives is situating transformative practices directly within the contexts (Buttimer, 1976; Hillier, 1999; Hoch, 2007; Chanet & Eubelen, 2015; Huq, 2020). As noted by Najafi et al. (2025), among many disciplines, the arts and social geography commonly rely on heuristic reasoning to support decisions and discoveries in situations of limited information. Although heuristic methods are sometimes criticised for producing only "second-best" or "partial solutions", in the context of the arts and creative thinking more broadly, this is not a drawback but rather a central mode of interpreting reality and fostering innovation.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> For a critical discussion see also Escobar (2014) and García-Domenech (2015). On the general uses of heuristics, see especially Nozick (1993).

To illustrate this dimension more clearly, the following sections present an example of an art-based heuristic method used to develop a new "sensitive approach" in urban enquiry and design. Heuristic methods typically operate through "simple rules," breaking down complex processes into manageable steps (Hertwig & Pachur, 2015). In the context of *The Sensitive City* project, each action was carried out in a way that allowed participants – both artists and non-artists – to respond freely and interact with the environment. The terms "sensitive" or "sensitivity" are often used to emphasise the symbolic dimensions of certain places, such as affectivity, iconicity, and memory (Smith & Billing, 2012; Kyttä et al., 2013; de Lemos Martins et al., 2019). In this specific experience, context-sensitive works explore goal-independent and non-functional values that, although often excluded from mainstream discussions, remain essential to qualitative inquiry and creative thinking (Coombs et al., 2018).

# 3. The Sensitive City project in Amsterdam

This section presents the case study of *The Sensitive City*, a project developed in Amsterdam that explores how artistic practices can function as heuristic devices for reading, interpreting, and intervening in urban environments. The outputs and methods of exploration were not entirely unstructured but were framed within the scopes and interests of the Principal Investigator (PI), who self-directed the activities. There was no specific "public framework" guiding the process, nor any intention or claim to replicate the project for broader collective purposes. This flexibility was enabled by the distinctive nature of the initiative and of the Host Institution (HI): *ARCAM* (*Architectuurcentrum Amsterdam*), which, being oriented towards applied research, supported the PI and his team in pursuing their work with the sole commitments of staying within budget and producing some outputs to be presented and discussed publicly. This section reconstructs the project's methodological premises (§ 3.1.), describes selected activities (§ 3.2.), and reflects on the insights they yield for both urban research and practice (§ 3.3.).

#### 3.1. Research design and methodology

The Sensitive City project is rooted in the specific context of an "architectural residency". All activities took place within the framework of a residency program promoted by the Host Institution (HI), a centre dedicated to fostering dialogue on architecture and the built environment. While this residency format is more typical of the arts, the HI approved its application to architectural research, thereby creating space for experimental and cross-disciplinary exploration while also providing financial and logistical support as well as visibility. This setup influenced both the methodology and the timeframe of the research (for a summary, see Table 1).

The *initial phase* involved composition and kick-off meetings with the research team, which consisted of the Principal Investigator (PI) – an artist-urbanist – one mentor (a professional senior architect), two artists (a Professional Dancer: PD and a Professional Musician: PM), and one academic specialist in urban studies. The *empirical phase* of the project lasted three months (March–June 2024). This was immediately followed by a *dissemination phase*, mainly consisting of a public exhibition

showcasing the works produced during the residency (until December 2024). Overall, the programme provided an honorarium and a budget for the PI to plan and present the activities together with the research team. The project was guided by a central research question: How do the senses alter or enhance the experience of the city? The complexity related to sensory experience and urban perception aligned with the original interests of the PI. The multidisciplinary focus on artistic practices aimed to enable forms of discovery in situations where information is partial or uncertain. The enquiry was developed through a process inviting participants to respond freely to the environment, using their senses to explore and express perceived qualities. While the approach encouraged openness, the process was not entirely spontaneous. The two artists worked in regular collaboration with the PI and under his supervision. Additionally, a group of twenty additional participants joined the activities; of whom nine were part of the HI extended team (including administrative staff, curators, and professionals in architecture and cultural events), and eleven were individuals who responded voluntarily to an open online call and were selected based on motivational letters. The volunteering participants (V), have participated in the exploratory activities of one of the two case studies, *Havenstad* (Figure 1), consisting in the navigation and exploration of local places, for about two hours, and always led by the PI and the involved artist (in this case, the dancer). The exploration aimed to sense the void created by the port's planned dismantling and to reflect on the potential of a water square as a spatial connector between the two banks of the IJ estuary.





Figure 1 | Havenstad explorations (Amsterdam, June 2024)

#### 3.2. Empirical explorations: art as urban inquiry

As the residency was hosted in Amsterdam by a local institution, all activities were situated within the city itself. The selection of specific locations was not defined a priori, but rather emerged gradually as the activities unfolded. In this regard, three main research phases emerged: (1) wandering, (2) exploring, (3) releasing. The key steps included: (i) on-the-spot experiential mapping through artistic techniques (e.g. sound recordings, tactile sketches) to document sensory stimuli in selected urban spaces (i.e. Havenstad and Mercatorplein in Amsterdam); (ii) phenomenological enquiry trying to detach (or "apply brackets") from possible preconceptions and eidetic reductions to

distil the sensory essence of urban experiences; (iii) artistic interventions, creating site-specific art projects (e.g. choreographies, music, paintings) to test how space is perceived and experienced sensorially (e.g. sense of balance, of void, fluxes); (iv) collaborative synthesis: partnering artists and users to test the efficacy of artistic insights in delivering certain environmental stimuli in these contexts.

The first phase, wandering, consisted of the selection of places, stimuli and themes to be explored. When selecting places, choices were guided by the relevance of certain topics widely discussed in the field of urbanism (e.g. density, mobility, cultural relevance, aesthetics) paralleled by a phenomenological interest (e.g. highlighting exchanges between the landscape and users while suspending judgements) to be evoked through the arts (e.g. dance, music, sketching). The selected places were Havenstad (a former harbour area) and Mercatorplein (name of the central square of the Mercatorbuurt neighbourhood, located on the west side of the city). Both locations (Figure 2), have been under the attention of urban planning and urban design scholarship (Langstraat & Van Melik, 2013; Bossuyt & Savini, 2018). The objective here was not to follow in the footsteps of previous studies but instead to offer alternative (not necessarily contrasting) ways of reading these places. The area of Havenstad encompasses parts of the western port region of Amsterdam, which has undergone significant transformation in recent decades. Currently, Havenstad is part of an ambitious urban redevelopment project, transforming a former industrial and port area into a sustainable, high-density residential and mixed-use district; however, at present (2025) Havenstad remains primarily a harbour area divided into two banks by the IJ river and surrounded by the building fronts of the former harbour district. The vast bay area is particularly exposed to climatic elements, in particular wind. By contrast, Mercatorplein is an example of "total design" where a monumental public space is conceived in unity with the layout of the buildings and even the lamppost detailing. Today, Mercatorplein is a vibrant multicultural hub in Amsterdam West, surrounded by cafes, shops, housing and community spaces used by a population that reflects the diversity of the city. It is regarded as an iconic spot in the city, reflecting the radical ambition of a rapidly modernising city, stemming from the ideas of Hendrik Petrus Berlage, the father of Dutch modern architecture and one of the masterminds behind the expansion of Amsterdam during the interwar period.

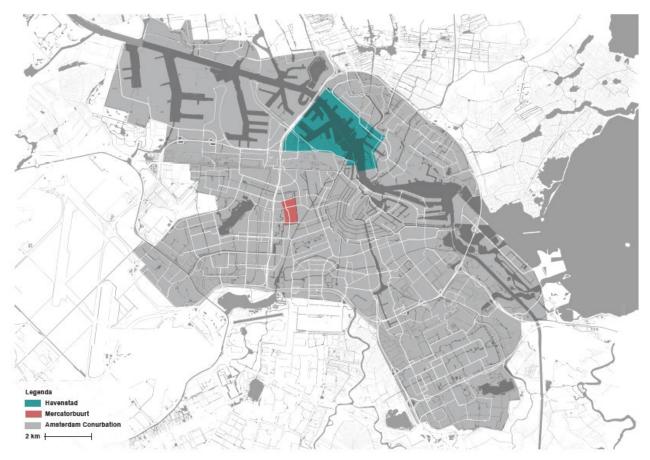


Figure 2 | Locations of the two areas investigated in *The Sensitive City* project

The second phase, *exploring*, consisted of on-the-spot investigations, directly involving professional artists to answer the question of how to enhance perceptions of specific qualities in selected places. The layout of *Havenstad* seemed particularly suited for exploring the sensory stimuli associated with the flow of the wind and water. In this regard, the themes that emerged were of "balance", understood as the somatic responses to environmental stimuli, and "emptiness", seeking relationships with the void at the geometrical centre of the bay area. The elected artistic method was that of dance and choreography to express the sensations of bodily movements in reaction to the external stimuli.<sup>2</sup> In *Mercatorplein*, the brickworks, the rounded forms and ornamental facades that accent the overall richness of activities in the area, were further enhanced by the constant flow of people, transport and vehicles. The mix of these elements suggested the use of music and composition in exploring the theme of "gestures" underlying space creation and the development of (urban) forms, as well as "funnelling" of auditory and visual perceptions suggested by the morphology of the place (Balaÿ, 2016; Aidoni & Chourmouziadou, 2020).

The third phase, *releasing*, consisted of conceptual re-framing for the public outreach part of the research. Here, drawings played a connecting role: explanatory visuals were made to translate and guide the work of the different artists towards the finalisation of the project (on this topic, see also Moroni & Lorini, 2021). Paintings, sketches, models and collages were made as a group to generate a cohesive narrative amongst the artists involved and also external participants (non-artists) joining the explorations through a series of site visits. Linking with architectural and urban studies research,

<sup>&</sup>lt;sup>2</sup> On the importance of balance and sensory cognition, see Fuchs (2018). See also Pallasmaa (2005, 2015), Mallgrave (2013).

the activities were reframed in a composite discourse connecting conceptual and empirical explorations. The final results were reported in a public presentation and exhibition in the spaces of the HI (from July to December 2024). The physical results are a collection of paintings, collages, illustrations, schemes, models, video, music and text exposed in the form of a public exhibition (Figure 3).

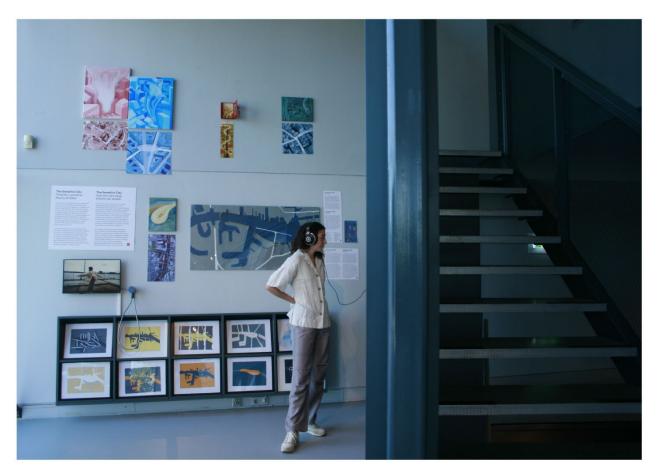


Figure 3 | *The Sensitive City* exhibition hosted at *ARCAM*, Amsterdam (July 2024)

## 3.3. The Sensitive City approach: main findings

The main findings can be summarised as follows. Firstly, from a methodological point of view, the project aimed for a multi-disciplinary approach, intersecting urbanism with arts (i.e. dance and choreography, music composition, visual arts). The act of *visualising* (through paintings, collages, videos, photos) in the overall experience represented the main medium for recollecting ideas, concepts, attempts, starting points and results (Figure 4). The role of visual art is crucial in spatial disciplines due to its suggestive yet programmatic value and intrinsic power of communication. Different types of brushstrokes, palettes, formats, visual language and emotional charge produced a strong direction for the visual narrative. The collection of the activities resulted in the general "sensitive approach" that the whole team conveyed along the process. In spite of a necessary aim towards a cohesive end, the overall methodology sought to make good "use" of arts as a value-specific

activity; an expressive form requiring full independence during the creative process in order to be an "instrument of experience" (Vuyk, 2010). Thus, the artists actively participating in the project were granted full freedom to act and react to the contexts as they preferred.



Figure 4 | *The Belly of the Harbour*, selected painting and collages based on the Havenstad exploration (Amsterdam, 2024)

In the case of *Havenstad*, the choreographer had never visited the location, and this lack of familiarity influenced the choreographic choices (Figure 5). The outcome was a blend of improvisation and choreography, spontaneously interwoven. The use of dance for *Havenstad* has deepened the perception of space in a currently desolated area characterised by water, cranes, high shores and sounds produced by the slowly dismantling industry of the harbour. This exploration made clear the already challenging evaluation of the human scale compared to the dimension of a modern harbour composed of heavy industry, logistics and natural elements like the strong wind that became the protagonist of the choreography. An interesting aspect highlighted the importance of the somatic experience of urban environments and its relative influence on behaviours. Dance enabled the use of unusual but valuable qualities of a typically deserted and rarely frequented environment, precisely because of the adverse climatic conditions. Metaphors aided the understanding of human cohesiveness in space. As suggested by Efland (2000), functional overlaps (of planned and unplanned spaces; or, in our case, real and surreal imagery) show the potential for different aspects of daily life to come together in a more integrated and meaningful way. For the *Havenstad* exploration, the harbour banks and continuous skyline suggested by the facades suggested the existence of a "water

square", also inspiring the comparison of the bay area to the "human belly" (a body area usually associated with emotions and feelings and central to human physicality).

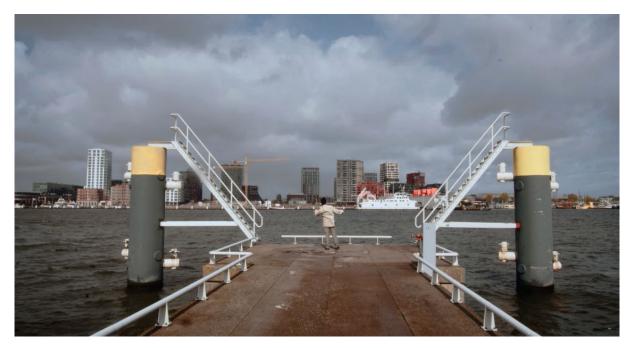




Figure 5 | *The Harbour's belly*, pictures from the teaser of the choreography created for the Havenstad exploration. Link at: <a href="https://www.youtube.com/watch?v=yQ92mCfjbhQ">https://www.youtube.com/watch?v=yQ92mCfjbhQ</a> (Amsterdam, July 2024)

The composer involved in *Mercatorplein* was familiar with the site but lacked prior experience in interpreting its architectural landscape. The use of sketches was particularly significant in integrating geometric language with musical expression (Figure 6). The *Mercatorplein* exploration attempted to establish an inter-semiotic relationship between urban planning and music, architecture and composition, physical forms and physical waves. In a sense, the aim was to understand the rhetorical

rhythm of the 1920s physical design of *Mercatorplein* and its surroundings. From an eye-level perspective, the overall design of the square and the entire buurt suggests a 'push' towards modernity – towards the modern city – through developments that followed the post-Second World War expansion, marked by physical gates and portals created by architectural and urban design elements. As suggested by some of the illustrations (Figure 7), architectural typologies are compared to musical instruments or rather to instruments of spatial composition that can express certain features that the eye and the heart will transmit as stimuli to our brain. Gates, barriers, peaks, street signs, crossings, passages, lines, dots, voids, and fills, just as in music, are descriptive and expressive elements in place. Improvisation and pure artist freedom were activities that continued this methodology and elaboration of the results. In the process, it became clear that art is the only medium for expressing the human condition in response to phenomena and perceptual atmosphere.



Figure 6 | Live sketching during the *Mercatorplein* exploration (Amsterdam, May 2024)

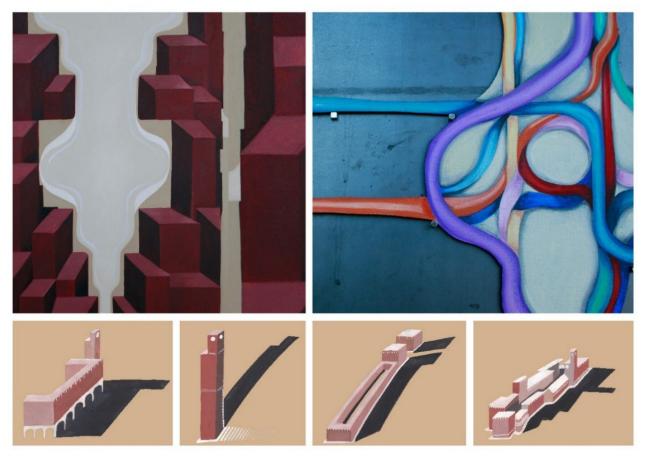


Figure 7 | *The Gates to Modernism and the Funnel Effect*, details of selected paintings based on the Mercatorplein exploration (Amsterdam, July 2024)

 $Table\ 1\ |\ Summary\ of\ the\ main\ information\ and\ activities\ related\ to\ the\ project$ 

Time frame	March-June 2024					July-December 2024
Preliminary phase	Experimental phase				Dissemination phase	
Team creation		Wandering (matching place and senses)	Exploring (empirical investigations)	Releasing (creation of art projects)		Public exhibition
PI: urbanist and painter  M: mentor architect  PD: professional dancer  PM: professional musician  A: academic  V: volunteering participants  HI: Host Institution	Key steps	on-the-spot experiential mapping through artistic techniques (e.g. sound recordings, tactile sketches)	phenomenological enquiry to detach from possible preconceptions and to distil the sensory essence of the place  site-specific art projects (choreographies, music, paintings)	collaborative synthesis: partnering artists and users to test the efficacy of artistic insights in delivering certain environmental stimuli in these contexts	Key outputs	Paintings Choreography Videos Musical composition Public lecture
Main contributors		PI, M, PD, PM, A, V, HI	PI, PD, PM	PI, M, PD, PM, A, V, HI		НІ

# 4. Discussion and concluding remarks

The Sensitive City project sought to develop an art-based heuristic method for spatial enquiry, serving primarily a dual function. First, it provided a phased structure for empirical investigations — wandering, exploring, releasing — which helped translate the broad premises and ambitions of the project into manageable, iterative stages. Second, it enabled discoveries by embracing the idea that partial or uncertain information does not impede the recognition of local qualities that may lie "unseen" within the urban landscape.

In certain debates, the presence of "information scraps" is often used to justify the adoption of sophisticated technologies or the implementation of new interventions (Collins, 1970; Leidner & Percival, 2022), typically with the aim of filling perceived gaps, following a kind of horror vacui logic. By contrast, the arts can offer more innovative, and at times radical or "subversive," ways of interpreting reality (Escobar, 2014; Guinard & Molina, 2018). This perspective is increasingly acknowledged as strategic within urban policy and place-making, where artistic practices are frequently employed to initiate, accompany, or critique ongoing processes (Richardson, 2016; Guinard & Molina, 2018). In the initiative described here, the arts are primarily regarded as cognitive tools that contribute to the development of alternative "sensitive approaches" in urban enquiry – approaches that may, even inadvertently, come to inform place-making practices. A possible objection is that the activities described here do not extend significantly beyond the use of the arts to construct metaphors about urban life.

At this point, it is useful to distinguish between "process arts" (dynamic) and "artefactual arts" (static), as proposed by Nguyen (2020). *The Sensitive City* engaged with both dimensions at different stages. Initially, the project focused more on process arts, placing emphasis on agency and experience. Artistic practices were explored for their capacity to evoke different moods and atmospheres, sometimes in syntonic tones (i.e. reinforcing and aligning with empirical cues) and sometimes in dystonic tones (i.e. conflicting with or countering empirical cues; Griffero, 2024). In the later stages, the project shifted its focus toward outputs – artefactual arts – although these could not have emerged without the prior emphasis on process. While this specific initiative sought primarily to emphasise "neutral" or "positive" emotional responses to ordinary landscapes, other projects using art-based approaches have foregrounded more critical dimensions of lived experience in particular urban contexts (see, e.g. Pinder, 2008). In this context, artistic practices are best understood as a starting point – not an end – in more profound exploratory approaches to local investigations.

It is often noted that, as complex systems, urban environments resist full and exhaustive comprehension. This difficulty arises not only because urban landscapes are often perceived as indivisible wholes (as suggested by John Dewey; Cutchin, 2007), but also because these wholes contain hidden qualities linked to tacit, experiential, and emotional dimensions that are intrinsically difficult to convey in their entirety (Polanyi, 1966; Milgram, 1970; Tuan, 1977; Thibaud, 2015). On the one hand, one might welcome the idea that a more "sensitive approach" to the variety and intensity of localised experiences should be more fully acknowledged by urban policymakers and spatial designers (De Franco & Moroni, 2023). On the other hand, one could argue that some dimensions of experience are so complex that a dedicated figure is required to bring them into focus. In this regard, artists can play a crucial role in expanding perception, making visible – or sensible – non-immediate qualities of specific contexts, and opening new interpretive possibilities for place-making.

Sensory-artistic practices are inherently situated, emergent, and responsive to place. The approach explored in this project advocates for urban methodologies that are not abstracted, but rooted in the lived, material, and affective conditions of the city. This perspective may contribute to and enrich urban research by combining analytical approaches in human geography with greater attention to sensory depth and spatial interaction (Matos Wunderlich, 2008; Stellaci & Moro, 2023; De Franco & Pacchi, 2024). For instance, during the wandering phase, artists uncovered unexpected layers of sound; in exploring, they experimented with structured interactions; and in releasing, rehearsed compositions engaged with public spaces across the city. These activities are key elements of the approach developed here. They exemplify how heuristic processes can guide artists not merely in representing insights, but in generating them – illuminating contextual qualities that may hold substantial value for the everyday lived experience of local users. In doing so, the arts contributed to revealing more than just conventional "kitsch feelings" (Griffero, 2024: 84). Rather than following a fixed protocol, the art-based heuristic phasing allowed the paths of inquiry to emerge organically, aligning with the Principal Investigator's interest in themes such as sensory urbanism and phenomenology. This aspect is particularly significant when considering the value of the arts in a non-instrumental way – beyond the logics of consensus-building or city-branding (Vuyk, 2010; Dekker & Morea, 2023). The activities demonstrate how art could not only reveal a wider spectrum of stimuli but also evoke them further, inspiring more radical acts of imagination (Escobar, 2014). In this way, creative solutions may transcend some general orthodoxies that underpin place-making practices, being overly functional or solution-oriented. The art-based heuristic approach adopted here is fundamentally *problem-oriented*, where also the inclusion of non-artist participants encouraged a synthesis of the overall experience, breaking down broader questions into smaller, workable sets of actions.

This process also generated unexpected outcomes. For instance, the seemingly barren landscape of the Havenstad docks evoked strong emotional responses by engaging directly with environmental stimuli (such as the wind). In this context, the emptiness of the space acquired a new, affective significance; beyond the functional requirement of the port area, the empty area became, in a sense, something to be preserved, resisting the urge for further intervention. By contrast, in the case of Mercatorplein, it was the external artistic intervention that helped to introduce a sense of coherence and order to an otherwise stimulus-rich, and at times cacophonous, environment. Emphasising a phenomenological approach was essential to create the necessary distance for the professional artist - not to reveal a hidden reality, but to perceive a parallel one shaped not only by sensory input but also by emotional experience. In particular, the synaesthetic and felt-bodily performances, considered both the visual and non-visual qualities of urban experiences, emphasising the relevance of the "here and now" (Blom & Chaplin, 1988; De Spain, 2014; De Franco & Moroni, 2023). Unlike many other initiatives, The Sensitive City project neither entailed nor advocated for the creation of permanent artistic installations or artefacts within the urban landscape. Instead, it primarily stimulated speculative imagination through processual reasoning, experiential performances, conceptual drawings, and spatial experiments – carried out independently of any specific policy framework or agenda. This aspect is particularly relevant for both public and private practitioners, who may benefit from supporting artistic or architectural residencies in diverse ways. In this respect, the support of a specific institutional context openly committed to applied research – such as the Host Institution (HI) involved in this project, ARCAM – was crucial to the development of the initiative, from ideation to dissemination.

While the project outlined here presents significant limitations in terms of generalisability (as it may not readily transfer to contexts lacking similar institutional support or expertise), the basic format of expertise-based residencies – whether in the arts, architecture, or other fields – is neither overly complex nor prohibitively expensive to implement. What appears more difficult is recognising that such art-based initiatives can – and, at times, should – be undertaken with a high degree of autonomy. This independence is essential to fostering speculative imagination and producing outcomes that are both singular and genuinely responsive to the atmosphere of a given place. From the perspective of operational replicability, the challenge lies less in the availability of centres, associations, and community of practice with expertise in the arts, architecture, or landscape – which can be found in virtually every city – than in the capacity to host projects of this kind: radically interdisciplinary, devoid of direct commercial utility, and without explicit civic mandate. A key aspect of this project was the almost exclusive focus on artistic practices and production. This dimension is often sidelined in favour of political, economic, or other instrumental agendas. In this sense, the independence and individuality of the observer make artistic exploration spontaneous, sincere, and intuition-based. It produces sensitive responses: subtle, mental, sensorial, refined, and emotional reactions to phenomena, atmospheres, or physical situations. Such responses can complement and enrich the classical design process. Rather than aiming for predefined results, this approach embraces an openended enquiry attuned to the "purposelessness" and subtle "unworldliness" of local landscapes qualities that may be worth rediscovering (Griffero, 2024: 78–79). This openness allows for a broader range of inputs, suggestions, and stimuli that can enrich debates within a specific geography or discipline. Unlike more data-oriented scientific approaches, the art-based sensitive approach deliberately acknowledges and uses the possible "biases" of the researcher. In this context, art was regarded as a heuristic tool.

As cities continue to evolve, harnessing the exploratory and interpretive capacities of the arts remains crucial to designing sensory-rich, human-centred environments. One possible limitation is that such initiatives may seem self-referential or of limited impact. This is partly due to the format of artist residencies, temporary by nature and centred on the practices of an individual or small group (as in the case discussed here). However, explorative initiatives are largely absent from the discourse on urbanism, which tends to rely instead on pragmatic surveys followed by solution-oriented approaches. Such methods lead to a view of the city as a mere system, rather than as an ecosystem that combines physical dimensions with emotional, phenomenological, atmospheric, and natural values, all of which shape the spaces we use and design. A valuable challenge would be to test a similar heuristic approach in other contexts, whether defined by spatial typology (such as ports or busy squares) or by particular sensory qualities. The aim of the sensitive approach should be understood and promoted as a simple yet fundamental tool for thinking; not to deliver direct solutions for specific spaces, but to provide a method of exploration that, by focusing on local sensibilities, can generate new questions and reveal hidden values. The principal investigator's prior familiarity with the sites studied is noteworthy, but not decisive. Sensations and feelings - more than memories or histories - can be deeply perceived even by those who encounter a place only briefly or temporarily. Embedding similar residency-based, exploratory structures into local initiatives could offer deeper insights into urban spaces and foster deeper, more imaginative and sensitive approaches to urban design and place-making.

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## CRediT authorship contribution statement

Jacopo Grilli: Writing – original draft, Supervision, Methodology, Investigation, Conceptualization. Anita De Franco: Writing – original draft, Writing – review & editing, Validation, Supervision, Conceptualization.

#### Use of AI tools

The authors used ChatGPT (GPT-5, OpenAI) for language editing support. Both authors reviewed and approved the final text.

## **Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper. One of the authors, as member of the editorial board, had no involvement in the peer review of this article and had no access to information regarding its peer review. Full responsibility for the editorial process for this article was delegated to another journal editor.

#### Data availability

No data was used for the research described in the article.

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