

SIMULACRUM OF THE CITY: EVALUATION OF THE BESIKTAS TOBACCO WAREHOUSE RENOVATION IN ISTANBUL WITH THE USE OF SENSEWALKING

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Abstract

The multisensory qualities of urban experiences are essential to the city's urban form, sensory-spatial dimensions, and cultural heritage. Vision occupies a privileged position in the distinctive characteristics of urban areas; however, a visual-centric examination must be transcended when considering renovation and conservation efforts in urban locales. The building in Besiktas, Istanbul, designed by architect Victor Adaman in 1929 and which served as a tobacco warehouse for several years, was demolished in 2007. In 2013, the building re-emerged in the urban morphology of Istanbul with its renovated appearance and function as a luxury hotel. This study aimed to examine the sensory-spatial effects of the warehouse's renovation on Istanbul's urban form characteristics. We developed a mobile, public participatory, and *in situ* urban method called *senswalking* to explore how the renovation influenced the spatial characteristics of the urban form. The discussion revealed how everyday multisensory encounters within the urban form were transformed during the latest stages of renovation. The novel method facilitated an investigation into the sensory role of renovations on the multisensory dimensions of urban forms. This study is the first to explore the auditory, olfactory, and haptic experiences in the Besiktas district of Istanbul. The insights will benefit architecture, cultural heritage, and urban studies in Istanbul and beyond.

Keywords: Renovations in historical urban forms; Cultural heritage; Urban sounds; urban smells; sensory urban investigation methods.

1. INTRODUCTION

The urban form is linked to various sensory-spatial experiences that emerge as humans inhabit and embody it [1,2,3]. "Multisensory experiences" encompass the understanding individuals gain from urban environments' physical and social structures based on their sensory perception, detection, and recognition. The activities in the place are essential for evaluating multisensory experiences because individuals are sensorially connected to the place through their sense organs, functions, and activities [4,5]. The sounds,

smells, and tactile urban elements are considered the most significant perceived multisensory identifiers of urban environments [6,7,8,9].

Istanbul is subject to transformation, like many cities worldwide. But the transformation story serves as a distinctive example of wider trends and processes based on opening up of national economies to international capital [10,11]. The changing sociocultural composition, political movements, urban planning regulations, and technology-driven activities have resulted in a contentious alteration of Istanbul's

historical and non-historical areas [12,13,14]. Since the 1990s, as globalisation has accelerated, Istanbul has undergone significant transformations in sensory-spatial organisations. The number of urban renovation projects, alongside the increase in shopping centres, housing developments, and central business districts, has surged, all connected to Istanbul's ambition to become a global city driven by neoliberal economic policies [15,16]. This situation has inevitably altered the spatial hierarchy by implementing projects that overlooked the inhabitants' needs and the city's unique urban characteristics. The coastal areas of Istanbul were the first to experience rapid transformation, alteration, and regeneration for socio-economic advantages [17,18,19,20,21].

Besiktas is a district outside the historical peninsula of Istanbul, known for its university campuses, art galleries, unique cafes, green spaces, tea houses, passageways, and coastline [22,23]. The Besiktas bazaar, fish markets, and bookstores are among the region's most significant attractions. With its historical and architectural merits, alongside a unique atmosphere, the urban form of the district exhibits distinctive urban qualities. Besiktas Square, located in the district of Besiktas, is one of the most important public spaces in Istanbul, characterised by a diverse demographic and everyday life practices that have shaped the square [24]. Thanks to its sociocultural diversity and spatial affordances, which blend the natural elements of the Bosphorus with artificial components and cosmopolitan lifestyles, this square remains one of the unique places in Istanbul [25,26].

This study was the first to examine the multiple sensory properties of the Besiktas area in Istanbul, focusing on one of the critical transformations of the region. We investigated the current sensory urban characteristics derived from the area's olfactory, auditory, and haptic qualities. The main question was how the sensory urban qualities, beyond the visual senses, influence the place's current sensory characteristics. We aimed to explore how multisensory dimensions are perceived by people after the urban form has been spatially altered.

The fieldwork used *sensewalking* [27,28,29,30,31]. We say people would evaluate spatial urban qualities as a combination of different senses [32,33,34]. This technique offers a flexible and novel approach to capturing multi-dimensional urban experiences through "visual" and "non-visual sensory perceptions". The place's "non-visual sensory perceptions" refer to our experiences relating to or proceeding from our ears [30], noses [35], and haptic sensations [36]. The *sense-*

walking motivates individuals to articulate their bodily interactions with the environment during their walks. The method's benefits include highlighting multisensory characteristics that can only be appreciated through direct location experience. This walking experience boosts individuals' sensory awareness in real time, aiding in collecting qualitative data on personal sensory urban interactions.

Our *sensewalking* helped us better understand the area's sensory dimensions and non-visual sensory urban identifications. In *sensewalking*, the primary tasks involved data recording while walking, observing, and experiencing the surroundings. Qualitative, humanistic, and personally identified data generated valuable insights into the sensory knowledge of the Besiktas area. Although there were previous works on the auditory characteristics of Istanbul [37,38], there had been no prior investigation into the smells and haptic experiences of the city's coastal area. The information on auditory, olfactory, and haptic experiences of the Besiktas area was new and original.

2. LITERATURE REVIEW

2.1. Besiktas tobacco warehouse and Baudrillard's conceptualisation of *simulacrum*

Besiktas Astro tobacco warehouse was completely demolished and rebuilt as a hotel on the district's coast. One of the first industrial structures of the Republic of Turkey, the tobacco warehouse, was constructed on the Besiktas coastline in 1929 by architect Victor Adaman. Photographer Charles W. Cushman captured an image of the building in 1965 (see Fig. 1), which showed a blue wooden ship delivering goods to the warehouse. The building was repurposed as a Grundig television factory and remained vacant until its conversion into a hotel. It stood abandoned throughout the 90s and even into the 2000s. Renovation of the tobacco warehouse began in 2008 and officially became a hotel in 2013. Ten years after the hotel's opening, there was only an unfamiliar facade amid an isolated urban area and numerous unanswered questions from the original tobacco warehouse. The warehouse was a significant landmark and architectural representation of Istanbul's intangible culture. People still call the place by its old name, "Besiktas tobacco warehouse". The building formed an indispensable part of the Besiktas coastal silhouette. People of various ages worked in the warehouse, contributing to Istanbul's social life and demographics [39,40,41]. At that time, it was a luxury hotel (see Fig. 1).



Figure 1. Cushman's 1965 photo of the historical Besiktas tobacco warehouse building (a) [42]. Below, we see the hotel building during the day (b) and night (c). [Source: Author]

The tangible and intangible characteristics of the city of Istanbul comprise a combination of architectural structures and the multisensory interactions of its inhabitants. The Besiktas tobacco warehouse renovation project has significantly changed the spatial usage of pedestrian and vehicle transport movements in Besiktas Square [43,44]. Unlike its former condition, the hotel building has become an isolated urban area, leading to infrastructure prob-

lems and usage restrictions. The ineffectiveness of the common sense exhibited by the citizens of Istanbul has merely witnessed this process. Following the renovation, the area began to lose its originality and now resembles an excessively hygienic and prestigious location. As the dynamic, multisensory nature of the place's bodily experiences started diminishing, the area's transformation re-coded its identity. Consequently, the new building, which severely restricts access to the coast, has created a situation that necessitates examination concerning current sensory urban experiences.

Jean Baudrillard (1929-2007) is a French philosopher who has critically examined media, contemporary cultural trends, consumer society, art, and architecture [45,46,47,48,49]. Baudrillard was influenced by the Situationist International movement of the 1960s [50,51], whose works engage with the experiential side of urban life. Baudrillard's "simulation theory" emerged in his book *Simulacres et Simulation* in 1981 [52]. In this work, Baudrillard expanded his observations of postmodern society's lifestyles, beliefs, and practices. He developed ideas about how sociocultural relations are shaped by the mediation of a society's thoughts and communication tools [53,54,55,56]. With his "simulation theory", Baudrillard focused on imitation, reality, and transformation, providing unique perspectives for architecture, urban design, and planning [57,58,59,56]. Baudrillard's "simulation theory" is founded on the idea that every transformation results in the imitation of the actual object, and its authenticity is lost due to economic and sociocultural issues. The theory implies that the actual turns into the unreal and indistinct form, as the copy takes the place of the actual [58]. The *simulacrum* simulates the originals while pretending to possess something that cannot be owned [60,58]. According to Baudrillard, contemporary harsh capitalist conditions create new architectural codes and principles, making all ideas related to authenticity in architecture and building design increasingly unattainable. We can understand the term *simulacrum*, which replaces built environments and buildings with objects, thoughts, beliefs, and emotions.

According to the hypothesis of this study, the *simulacrum* in the urban form is a copy of authentic and original buildings that either had no reality to begin with or no longer have an original after renovations or transformations. The *simulacrum* in the built

environment reflects a copy of the original function and spatiality of the building, which cannot successfully imitate the unreal through experiences. In this study, we examined the Besiktas tobacco warehouse renovation project and the current multisensory urban experiences of the building and its surroundings. The study questioned how the building's transformation influenced the experiences, memories, and feelings related to the place. We aimed to evaluate whether replacing the Besiktas warehouse building with a luxury hotel could be interpreted under Baudrillard's conceptualisation of *simulacrum*. This approach offered a novel sensory perspective to analyse the sensory effects of urban modifications.

2.2. The senses and what does walking mean to overcome *ocularcentrism*?

People experience urban forms through their ears, noses, skin, and taste buds; the human body is inherently sensory and benefits from these qualities in processing urban experiences [7,34,36,61,62]. Different sensory experiences manifest in urban morphologies [63,64]. Urban forms are perceived as a result of various combinations of sights, sounds, odours, textures, and tastes [9,65,66,67]. Olfaction is a critical component of an invisible urban element, where the urban environment is experienced through the sense of smell, providing a profound understanding of one's surroundings [31]. Olfactory perception may enhance the sense of taste; odours can play a vital role in the tasting experience. Thus, taste often intertwines olfactory perception [68,69,70]. The auditory characteristics of a place can stimulate and influence emotions; similarly, each location possesses a unique identity shaped by its array of sounds and voices [71,72]. Haptic (tactile) perception offers an essential connection to the built environment through our skin. Haptic knowledge is particularly significant for urban comprehension. We cannot perceive kinaesthesia (awareness of body part position and movement through sensory organs), temperature, shape, size, and solidity without haptic sensations, as reliable spatial information is gleaned through haptic urban experiences. Experiencing places is "multi-sensorial" in nature, and to avoid *ocularcentrism* (the privileging of vision over the other senses) [3,73,74], it is beneficial to examine the matter of multisensory urban experiences, as each location has its unique spectrum of senses, often becoming fragile amid urban transformations and modifications.

We know that sensing and walking practices are

closely linked to one another. The examination of sensory experiences must be conducted using embodied methodologies. A mutual and inseparable relationship exists between sensory qualities and knowledge of urban form [75,76,77,78]. People experience places through their ears, noses, skin, and eyes and evaluate them according to how they sound, smell, and feel, beyond mere vision [1,79,80,81].

Walking is a cultural, political, and creative means to explore and understand the city's urban components. These walking practices ensure a sensory approach to defining and evaluating urban spaces. Sensing and movement cannot be separated. Walking facilitates a sensorial interaction between the body and its environment [61,82,83]. As an inescapable aspect of daily life, walking embodies a bodily performance with distinct lived attributions. Walking is a means of experiencing place and, in this context, represents a profound spatial performance. Daily walking practices generate a sense of place [83,84].

3. THE METHODOLOGY DESIGN

3.1. The *sensewalking*: A multisensory, ethnographic, and human-centric urban investigation method

The *sensewalking* method focuses on the multisensory aspects of the urban form to move beyond the hegemony of visual senses [27,30,84,85]. As a qualitative approach, the method is centred on the multisensory experience of being in the location of the urban environment, involving at least one person walking in the urban environment. The data collection uses the walk to enable the walkers (participants) to define and interpret the mutual link between the multisensory urban features and sensory urban experiences.

McLean's work focused on subjective olfactory experiences to challenge the supremacy of the visual experience. The walkers classified the urban smells as episodic and background smells during their walk in Singapore [35]. In the context of the "Sensory Cities Network project" in Eigelstein, Cologne, the exploration of how we understand urban spaces through haptic urban experiences was investigated. For *sensewalkings*, some participants were asked to walk blindfolded through the field area [a street] and describe in detail what they could feel without relying on visual images. Some walkers were not blindfolded and included individuals from different age groups to observe sociocultural interactions. They experienced the built environment's haptic sensations through the theme of "touching the city". The study reported that the walking prac-

tice nurtured a special relationship between our haptic experiences and the architectural surfaces of urban places. The haptic experiences of the walkers provide unique insights into the built environments [85].

Paquette and McCartney's study conducted *sensorywalks* through sound, photography, and video recording. Interviews made with open-ended questions accompanied the walks. The study highlighted the intimate relationships between the walkers' movements and listening experiences [86]. The *sensorywalks* were also done to investigate the quality of the urban soundscape and *lightscape*. The study was based on Rome's sound and light perception and found that urban liveliness and texture are related to the sonic and light environment. We understand that auditory information about the cities needs to be regarded in urban studies and planning [30].

One of the inspiring sensory-based studies, SENSO-TRA, was a project funded by the European Research Council (ERC) and led by Helmi Järviluoma from the University of Eastern Finland. The project examined transformations in the sensory environment across three European cities. It aimed to explore the mediations of embodied sensory urban experiences amid the physical and sociocultural changes in the built environments. The timeline spanned from 1950 to 2020 to evaluate both past and present sensory urban experiences, focusing on the case cities of Brighton (UK), Ljubljana (Slovenia), and Turku (Finland). This study conducted several *sensorywalks* from 2017 to 2021 in these three cities. The findings indicated that, through time-mediated sensory experiences, urban modifications redefined the meaning of places and shaped embodied memories. The case findings revealed that the sensory dimensions of these cities are interconnected with technology and sociocultural processes [87,88].

3.2. The case study: The *sensorywalking* of Besiktas, Istanbul

The method of this study was based on walking simultaneously to experience and capture the sensory attributes of the place. One of the objectives was to overcome the limitations of recording and capturing sensory experiences based on individually identified sensory qualities in urban environments. The study employed a multisensory, ethnographic, and human-centric *sensorywalking* approach to gather data and move beyond visual-based methods. This mobile approach illustrated how people experienced multi-

sensory encounters in the transformed setting. The *sensorywalking* method, which included note-taking, photography, and questioning, was conducted in the Besiktas area of Istanbul along a defined route; five central nodes were identified to evaluate and describe the sensory experiences of the place.

Three *sensorywalks* (one solo *sensorywalking*, one group *sensorywalking*, and one couple *sensorywalking*) were conducted with different groups of people, ensuring that each person participated in only one walk. The first *sensorywalking* took place in Besiktas Square and lasted nearly two hours. Three individuals (two females and one male) participated in the solo walk. The participants walked individually in the square, focusing on the area's smells, sounds, and tactile features. For the group *sensorywalking* sessions, five people (three females and two males) followed the route between Besiktas Square and Hayreddin Barbarossa Tomb. In the group *sensorywalking*, the participants were required to walk along a selected route (<https://maps.app.goo.gl/EsoXboe23UZSYDph9>) and stop to evaluate and define their sensory experiences of the location. The walkers took notes and described the experiences they encountered. Based on intensity, the walkers ranked their sensory experiences on a scale from one to five, with one indicating the lowest level and five the highest. Following the route was essential during the group *sensorywalking*. The first stop was Besiktas Square (see Figure 2, a), followed by the Shangri-La Bosphorus hotel (see Figure 2, b), then the participants stopped at Barbaros Hayrettin Paşa Pier (see Figure 2, c), followed by a visit to Barbaros Square (see Figure 2, d), and finally, the walkers concluded at Hayreddin Barbarossa Tomb (see Figure 2, e). The data collection process for the group *sensorywalking* took nearly three hours. The last walk, the couple *sensorywalking*, was undertaken by a couple (one female and one male).

The *sensorywalks* were conducted by 10 adults (6 female and 4 male) who have experienced the area as an urban environment. All the participants resided in Istanbul, but none lived in the Besiktas district. On weekdays, the solo and group walks took place in July and August 2024 between 9 am and 3 pm. The weather was bright and sunny. The couple *sensorywalking* was held on a weekday in October 2024 at 10 and 11 pm., with no rain or wind.

Besiktas is one of Istanbul's student-friendly districts [39,89,90]. The users' quality of life and educational level are high [91,92]. In the *sensorywalks*, half of the walkers were undergraduate students between 18 and



Figure 2.

The illustration shows the nodes of group *sensewalking*. The images of (a) belong to Besiktas Square, (b) belong to Shangri-La Bosphorus Hotel, (c) belong to Barbaros Hayrettin Paşa Pier, (d) belong to Barbaros Square, (e) belong to Hayreddin Barbarossa Tomb. [Source: Author]

22 years old, while 5 participants were over 30 and had graduated from a university.

We were aware that additional urban components may need to be considered. We may say that if the time and sessions of the walks were extended, the data would be improved in terms of the multisensory urban qualities of the place. We have just conducted the summer and autumn sessions of the year. We know that the data based on walkers from different ethnic backgrounds, professionals, interests, and ages would be beneficial. The walkers' past experiences, memories, personalities, and beliefs may change the experiences. Perceived sensory urban qualities may be related to the walkers' physical conditions, psychological moods, and external factors such as temperature, seasons, or time.

4. THE FINDINGS: THE CULTURAL SOUNDS, SMELLS AND TEXTURES IN BESIKTAS DISTRICT, ISTANBUL

This chapter discussed the study's qualitative, multisensory, and humanistic findings. The solo and couple *sensewalkings* have provided detailed insights into the multisensory cognition of Besiktas Square.

In the context of the haptic sensory experiences of the place, the *sensewalking* findings indicate that the giant billboards, signboards, graffiti, and wall paintings were remarkable elements of the experience. The smooth flooring, straight paths, small barriers, connected branch roads, and colourful streetlights contributed to the haptic identity of the surroundings. About the haptic experiences of the buildings, the imageable facades, symmetrical windows, ornate columns, recognisable entrances, legible plans, high ceilings, long passages, luminous interiors, and narrow courtyards serve as unique sensory markers of the place. Concerning facade features, we observe some distinctive building materials: stone, concrete, wood, brick, metal, and glass. The permeability and massiveness of the facades are apparent to passers-by. To describe the characteristics of the windows, the walkers used terms such as colourful, simple, solid, glossy, opaque, rectangular, circular, and reflective. The area's doors were ornate, plastic, wooden, plain, painted, polished, and metallic. The findings based on the haptic experiences-based findings revealed that the imageable facades, symmetrical windows, ornate columns, recognisable entrances, legible plans, high ceilings, long passages, luminous interiors, and narrow courtyards of Besiktas Square are recognisable (see Table 1).

In the context of auditory experiences, the walkers caught the sounds of celebratory songs and the chatter, laughter, and giggles of people in Besiktas Square. Besiktas Square is renowned for celebrating the football match results of the Besiktas sports club. Regarding music, the walkers noted that they heard beautiful tunes from cars in traffic near shops and stores. The walkers recognised the music performed by street artists. The background sounds were significant; for instance, the walkers mentioned that the *ezan* (call to prayer) was unmistakable. The sounds related to transportation – such as cars, buses, and ferries – were discernible. The ferry whistles and car horns topped the list. As the area was coastal, nature-based sounds were vital to the auditory urban experience. The walkers pointed out that bird songs, particularly the cries of seagulls, were distinctive to the locale. The waves from the Marmara Sea were prominent, causing the ferry horns to blend with the wave sounds. The mewing of cats was noticeable as many street cats inhabited the area (see Table 1).

The urban landscape's olfactory experiences present various scents and odours. The prevalence of food and drink-related aromas was anticipated, as the area features numerous bakeries, seafood restaurants, and cafes. Turkish tea and coffee are sourced from the local tea houses. Street vendors offer roasted corn and chestnuts, creating a strong presence of freshly baked aromas throughout the region. The coastline boasts many restaurants serving fish, antipasti, and *meze* even during the daytime, enabling visitors to sense the enticing smells of freshly grilled fish. The bakery shops in the Besiktas neighbourhood are renowned for their diverse range of pastries, easily found in the vicinity; as a result, the fragrance of fresh baked goods permeates the area. Locals favour the rich offerings from the street vendors, with the scent of *simit* (a circular sesame bread) prevailing. The aroma of hot *doner-kebab* fills the air as one walks through the area (see Table 1).

In the group *sensewalking* session, the walk was designed to investigate the multisensory experiences of the location and the peripheries of the old Besiktas tobacco warehouse building. Three sensory modalities of the area were selected to focus on the five stops. The first modality was the auditory experiences of the locality to understand what kinds of sounds are present in the area. The second was olfactory experiences, which were based on the distinctive smells of the region. We considered the haptic urban experiences related to the place's

Table 1.
The table depicts the solo *sensewalking* findings of the area. [Source: Author]

Thresholds of olfactory sensory experiences			
Food-drink based smells	Background smells	Nature-based smells	
Turkish tea and coffee smells roasted chestnut smells roasted sweetcorn smells fish, antipasti and meze smells fresh bakery and <i>simit</i> smells <i>doner-kebab</i> smells	cigar smokes urine smells perfume smells dust smells	sea smell moss smell smell of grass humidity smell flower smell	
Thresholds of auditory sensory experiences			
Human-based sound	Music-based sounds	Background sound	Nature-based sounds
celebrators songs chatting, laughing, giggling of people	music from cars in traffic music from street artists music from shops and stores	ezan (call to prayer) sounds from construction works transportation-related sounds (car, bus, ferry)	bird songs seagull screams wave sound cat mewing
Thresholds of haptic sensory experiences			
wall, board, panel materials & features	floor, street, road materials & features	building materials & features	
graffiti wall paintings big billboards and signboards	smooth floor straight route barriers connected branch roads colourful street lights	stone concrete wood brick glass metal permeable massive transparent	windows materials & features colourful simple solid glossy opaque rectangular circular reflective
			door materials & features ornated plastic wood plain painted polished metallic

textures, facades, wall paintings, and graffiti. As the participants walked, they took photographs and ranked their experiences. At the first node of the group *sensewalking*, the walkers experienced Besiktas Square. The most significant smells were *simit*, body odour (sweat smell), Turkish tea, coffee, the sea, and flowers. Concerning auditory experiences, the most distinctive were the ferry whistles, traffic sounds, *ezan*, and human sounds (talking, giggling, shouting). To define the haptic experiences of the area, the walkers referred to concepts such as physical intimacy, intensity of walking, people, smooth floors, imageable facades, recognisable entries, high ceilings, and long arcades. At the Shangri-La Bosphorus Hotel, the most notable odours included the sea, coffee, perfumes, and moss. The auditory qualities of the area were characterised by ferry whistles, seagull calls, wind sounds, and human sounds (talking, giggling, shouting). For the haptic qualities, the walkers described

the long white stone walls, barriers, solid facades, small trees, the intensity of pedestrian traffic, imageable facades, symmetric windows, recognisable entries, high ceilings, and an isolated atmosphere. At Barbaros Hayrettin Paşa Pier, the smells of the sea, moss, humidity, and roasted chestnuts characterised the area's olfactory profile. The sounds identified by the walkers included ferry whistles, human sounds (talking, giggling, shouting), footsteps, seagull calls, and waves, painting a diverse auditory landscape. The haptic experiences included the swift movement of pedestrians, graffiti, wall paintings, historical facades, ornate windows, recognisable doors, high ceilings, and rustic wooden entries. At Barbaros Square, the noticeable smells included the sea and moss. During the walk, the participants identified ferry whistles, traffic sounds, *ezan*, human sounds (talking, giggling, shouting), footsteps, car horns, and the noise of pavement construction. The haptic experiences

Table 2.**The table depicts the group sensewalking findings of the area. [Source: Author]**

	Besiktas Square (node1)	Shangri-La Bosphorus Hotel (Tobacco Warehouse's renovated building) (node2)	Barbaros Hayrettin Paşa Pier (node3)	Barbaros Square (node4)	Hayreddin Barbarossa Tomb (node5)
olfactory urban experiences: smells of the surrounding	<i>simit</i> smell (1) body odour (sweat smell) (2) Turkish tea and coffee smells (3) sea smell (5) flower smells (4)	sea smell (5) coffee smells (3) perfumes smells (3) moss smell (4)	sea smell (5) moss smell (4) humidity smell (4) roasted chestnut smell (3)	sea smell (4) moss smell (3)	flower smells (4) tree smells (4) smell of grass (4)
auditory urban experiences: sounds of the surrounding	ferry whistles (4) traffic sounds (4) <i>ezan</i> (call for praying) (4) human based sounds(talking, gig- gling, shouting) (5) footsteps sounds (3)	ferry whistles (5) seagull screams (5) wind sounds (5) human based sounds(talking, gig- gling, shouting) (3)	ferry whistles(4) human based sounds(talking, gig- gling, shouting) (4) footsteps sounds(3) seagull screams(3) wave sounds(3)	ferry whistles(3) traffic sounds(3) <i>ezan</i> (call for praying) (3) human based sounds(talking, giggling, shouting) (4) footsteps sounds(4) car horns(3) pavement construction works sounds (3)	bird songs(4) <i>ezan</i> (call for praying) (4)
haptic urban experiences: qualities of textures, facades, wall paintings, graf- fities of the sur- rounding	physical intimacy (4) intensity of walking people (4) plain and smooth floor (5) imageable facades (4) recognizable entries (3) height ceiling (4) long arcades (3)	long white stone walls (5) barriers (4) solid facades (5) small trees (4) intensity of walking people (1) imageable facades (3) symmetric windows (3) recognizable entries (3) height ceiling (3) isolated atmosphere (4)	rapid movement of pedestrians(5) wall painting(3) historical facades(5) ornated windows(4) recognizable doors(4) height ceiling(4) wooden and rustic entries(5)	intensity of walking people(4) graffities(4) stone facades(3) stone sculptures(4) concrete street furniture(5) non-transparent windows of the naval museum(4) metal finishing of the museum glass facades(4)	concrete pavement(3) smooth floor(3) historical facade tex- tures of the tomb(4)

here encompassed the intensity of pedestrian movement, graffiti, stone facades, stone sculptures, concrete street furniture, non-transparent windows of the naval museum, and the metallic finishes of the glass facades. At the last node, Hayreddin Barbarossa Tomb, the walkers predominantly experienced the smells of flowers, trees, and grass. The tomb features a large green garden, where bird songs complemented the *ezan*, dominating the ambience. The haptic qualities described included the concrete pavement, smooth floors, and historical textures of the tomb. At the selected node, the walkers provided insights into the auditory, olfactory, and haptic experiences they encountered. The number of respondents' ratings (on a one to five Likert scale) indicated the intensity of the node's sensory features (haptic, auditory, and olfactory experiences) (see Table 2).

The participants were asked three questions at the end of solo, group, and couple walking sessions. We inquired about the kinds of sensory experience-related problems they encounter with the current cultural composition of the building. Two individuals highlighted changes in the place's identity and image. Four participants expressed concerns regarding alterations to the sense of place. Issues related to the loss of collective memory (identified by two individuals), historical texture, authenticity (noted by three individuals), and sense of familiarity (mentioned by four individuals) were also raised by the walkers. Three walkers reported feeling lost, while another three remarked that artificiality in the urban context and the site becoming an ordinary place was problematic. Three participants pointed out the lack of connection between the past and the future (see Figure 3).

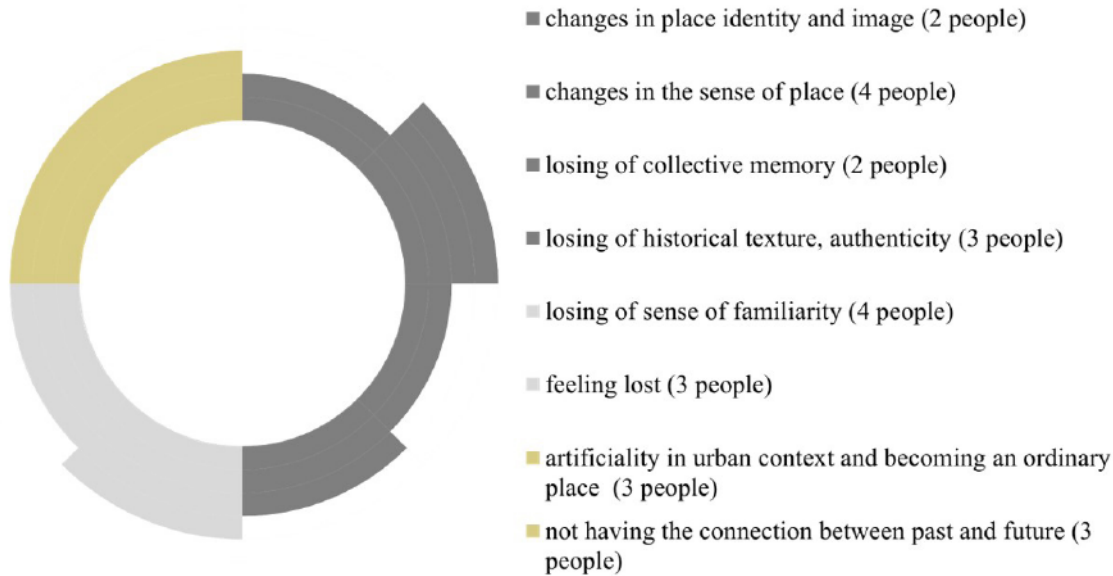


Figure 3.
The illustration depicts what the walkers think about renovating the Besiktas tobacco warehouse building. [Source: Author]

5. THE DISCUSSION

The urban form is experienced and mediated through the senses. Sensing is multi-modal; therefore, a metropolitan area involves more than just vision. Understanding the urban form necessitates attention to sensory dimensions beyond the visual to capture multi-modal urban experiences. Examining transformations in a place must focus on sensory urban experiences [6,7,8,93].

Simulacrum can be understood as a non-identical, undistinctive transformation of the original. Baudrillard's theory addresses many vital points when interpreting Besiktas's tobacco warehouse renovation project. The "simulation theory" implies the unavoidable effects of the transformation issue. The transformation of the urban space is included in the concept. The theory emphasises sensory urban qualities, sociocultural elements, and urban forms with their origins to avoid *simulacrum*. We know the tobacco warehouse building, first built in 1929, was one of the first industrial structures of the Republic, featuring a unique facade that has remained in the memory of urban residents for years [24,40,41]. When the wooden mansion from the Ottoman period, previously located on the site, burned down, the area was repurposed as a tobacco warehouse. After the warehouse was vacated in the mid-1980s, it fell into a state of dereliction. The building on the

Besiktas coast, constructed in the Republic's early years and used as a tobacco warehouse for a long time, has remained abandoned for years. The plain yet distinctive facade of the tobacco warehouse was one of the remarkable visual features of the area. The durable design of the spatial components worked effectively with its surroundings, as local residents and tourists utilised the spaces for various activities. Although the tobacco warehouse was registered as an industrial heritage element as a second-degree immovable cultural asset in 2005, the construction of the hotel, part of the restoration project, commenced in 2008.

The everyday experiences of urban spaces were inevitably infused with sensory perception, reception, and production linked to social interactions [29]. The tobacco warehouse building project's disconnection with the local community has adversely impacted the area's intangible qualities and sensory attributes. The *sensewalking*-based fieldwork addressed the questions of what kinds of multisensory experiences shape the sensory definitions of the place and how the sensory aspects of the tobacco warehouse building's renovation contribute to the characteristics of urban form.

The tobacco warehouse building in Besiktas was an industrial heritage of the Republic period of Turkey. It was transformed into its current state in three

stages and replaced by a hotel. The local authorities decided that the building should first be restored, then “two facades should be preserved”, and then “demolished and rebuilt”. In 2005, the Istanbul 3rd Board of Preservation of Natural and Cultural Assets decided that the building was within the scope of industrial heritage and should be registered as a cultural asset. The structure should be restored without being demolished. In 2006, the Istanbul 3rd Board of Preservation of Natural and Cultural Assets approved the change of function in the restoration project. A tobacco production museum was offered in the renovation project to establish a relationship with the building’s qualitative value and importance for the collective memory. Following the decision, the renovation began to build a hotel by preserving the two walls of the tobacco warehouse facing the sea and the Dolmabahçe Palace. However, due to problems with the ground, new decisions and applications were made, and at that time, it was decided that the building should be completely demolished and rebuilt [25,26,41].

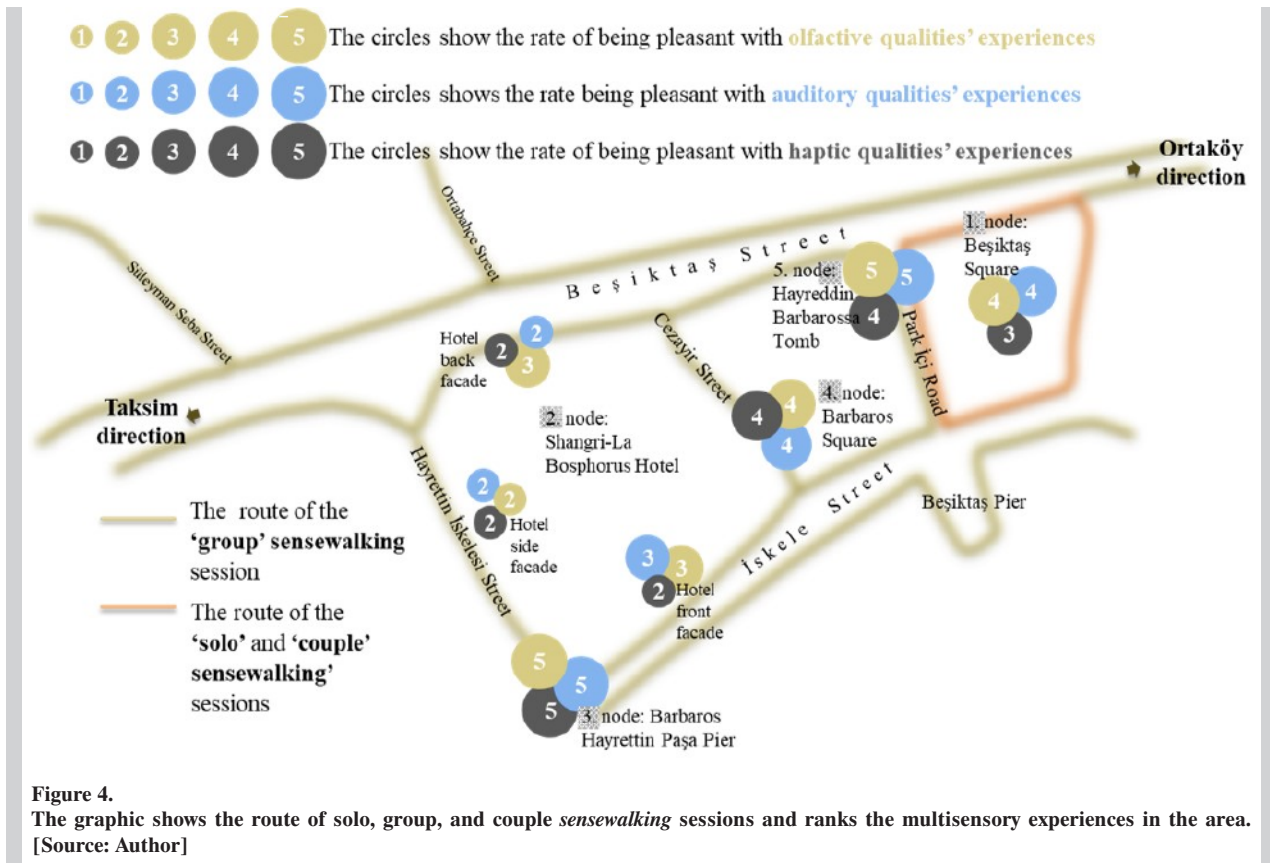
We referred to Baudrillard using the word “copy” when explaining the “simulation concept”. According to him, the “simulation concept” is imitated by a copy. When an original is copied, the simulation has no connection to the original, making it impossible to determine which is the original and which is the copy. There is no longer an original that exists before the copy, and it is possible that the original, indistinguishable from the copy, is also a copy [48]. In the context of the Besiktas tobacco warehouse renovation project, the transformation overlooked the area’s urban texture and material characteristics. The renovation project resulted in a final copy building devoid of traces of the past and intangible culture. The assessment did not account for the original building’s sounds, smells, and tactile features. The project’s conclusion indicated that issues on the ground floor of the building would prevent the original facades and walls from standing, thus necessitating reconstruction and renovation with authentic materials and techniques. The rendering of the building resulted in a gentrified urban area that became a world-class luxury hotel along the shoreline.

Sensory metaphor is closely linked to people’s presence as they live and move as organisms in the urban environment alongside habitations. The oscillations between the city’s physical and experiential dimensions relate to transforming spatial usage, memories, feelings, and pedestrian movements. Therefore, the physical transformation process must include a mul-

tisensory consideration of the place. The building, Shangri-La Bosphorus, officially opened in 2013. The hotel, constructed on the tobacco warehouse site, is a 14-storey, 7-star hotel, seven floors of which are underground. The hotel’s height reaches 27 metres at its peak, making it the second-tallest building on the coast after Dolmabahçe Palace, which has a height limit of 17.5 metres. The enormous size of the hotel was noticeable compared to the volume of the historical Barbaros Hayrettin Paşa Pier. Nearly years ago, there were special tea houses near the pier, creating such a crowd that even locals struggled to find a place to sit along the coastline. Pedestrian movement decreased significantly in the area after the hotel’s entrance blocked the lively atmosphere on Hayrettin İskelesi Street. The renovation project of the tobacco building influenced walking patterns with the hotel’s white, long walls, particularly since students ceased to congregate and most street artists have left. We witnessed ethnic street musicians performing near the tobacco building before the modification; many audiences could hear them easily, even late at night. The luxury ambience of the current hotel entrance, with its standing guardians, diminished the authenticity of the street’s distinctive sensory features. Although the visual and haptic properties of the area required careful consideration to promote the sensory mosaic of the place, the unique facade encountered haptic challenges alongside the İstanbul Naval Museum. Fieldwork findings revealed that the historical textures and haptic components belonging to Barbaros Hayrettin Paşa Pier were perceived as pleasant, while the renovated facades were deemed unpleasant. The textures rebuilt over the last decade were regarded as undesirable. The outcome suggested that the distinctive sensory features of the area had penetrated and eroded (see Figure 6).

The pleasant auditory features included ferry whistles, bird songs, seagull calls, and music reflective of the area’s unique cultural soundscape. In contrast, the displeasing auditory elements, such as car horns and construction noises, were linked to municipality-led developments and globalisation-related challenges. Sounds from mechanical devices or transport activities were categorised as unpleasant. The large advertisements, along with the local signboards, were also perceived as unappealing.

The renovation situation was closely linked to Baudrillard’s theory. This point suggests that capital-oriented urbanisation has damaged the unique haptic composition of the area’s cultural heritage, transforming it into a place of rapid renovation,



refinement, and marketing. Regarding the olfactory qualities of the area, it can be said that the aromas of food and drink correlate with the growing number of dining establishments in the vicinity. The strong scent of the sea indicates the area's proximity to the coast, serving as one of its sensory markers. The pleasant sounds, textures, material characteristics, and scent definitions complement the region's cultural heritage. However, the hotel renovation has resulted in highly problematic spatial configurations, deteriorating the area's tangible and intangible auditory experiences. Data indicates that the lowest levels of pleasantness concerning multisensory experiences were observed at the hotel site (formerly an old tobacco warehouse) and its surroundings (see Figure 4).

In the case of the Beşiktaş tobacco warehouse, the role of senses beyond vision has been significant, particularly in how people experienced olfactory and gustatory encounters within the environment, which requires close examination. The mainstream studies concerning the Beşiktaş district tended to focus on its physical structure while neglecting its sensorial dimensions. This study asserted that understanding

sensory urban experiences could provide new insights into the multisensory interactions within the urban environment.

The study stressed that:

- There was a close relationship between the physical transformation and the sensory dimensions of the urban form.
- Urban transformations that disregard the distinctive sensory dimensions, community support, and local residents' demands may undermine the diversity of urban experiences.
- A multisensory examination of transformed urban areas needs to be conducted alongside analyses of their functions.

The fieldwork data from this study varied from previous research concerning Beşiktaş. The original findings indicated:

- The everyday multisensory encounters in the Beşiktaş area were transformed through recent urban modifications.
- The non-visual urban features (olfactory, auditory, and haptic) of the Beşiktaş area, alongside visual

features, shaped the sensory character of the urban form.

- Non-physical urban attributes, such as sensory dimensions, are linked to the cultural heritage and characteristics of the urban form in Besiktas.

The tobacco warehouse building offered a unique spatial experience with its iconic facade facing the Bosphorus and the tea gardens along the shore, where human movement was vibrant alongside various urban activities. Laughter and chatter fill the air, people dash to catch the ferry, and the scent of seaweed from the sea always contributes to the sensory interaction of the place. Conversely, the current hotel building appears to have severed the collective memory and intangible cultural bond between the past and the future. While each sense forms a distinct relationship with its surroundings, we perceive by integrating our sensory information. When the lived experience was eradicated due to alterations to the space, its functions could no longer transcend being a replica that cannot identify with itself and appears different from itself. Although the *simulacrum* building (the hotel) did not intend to substitute the authentic, it gradually established its reality within the coastal composition of Besiktas. Following the renovation of the building, one might assert that urban experiences in the location were confronted by intangible culture, memory, history, and the authentic atmosphere.

Through the *senswalking* study, we observe that the renovation of the tobacco warehouse building has compromised the sensory qualities of the urban form due to its non-public spatial usage, enormous size, and non-public function. The absence of unique intangible sensory attributes of the place, which we were unaware of during daily life, has resulted in certain sensory limitations associated with the location. The *senswalking* method in the Besiktas district examined the area's olfactory, auditory, and haptic dimensions. Although multisensory qualities tend to be diminished under urban changes, they are vital components of the street's invisible characteristics. The sensory conditions of the urban form directly influence the sociocultural composition of the place. The information regarding the multisensory experiences gave us an understanding of how people were acquainted with the place's intangible features. The findings may emphasise that the sensory dimensions of urban form can serve as a toolkit for designers in future renovation projects. City managers and local municipalities can benefit from sensory urban data.

6. CONCLUSIONS

Istanbul's urban area has undergone numerous regeneration processes; the historical buildings at the critical axes of the city were directly related to this transformation. The Besiktas district, situated outside the historical peninsula of Istanbul, possesses a distinct identity regarding the rich opportunities for urban activities. Although often overlooked, the "multisensory experiences" are essential for examining human and world interrelations. Visually dominant approaches threaten the exploration of multisensory interactions. Contemporary city planning, urban design, and management practices must pay greater attention to the interaction of all senses and bodies within a sociocultural context during the urban experience.

The study investigated multisensory urban experiences within transformed urban forms, focusing on the Besiktas tobacco warehouse in Istanbul. Philosopher Baudrillard's "simulation theory" was examined to discuss the connection between urban modifications and changes in the multisensory experiences of urban forms. We considered the place's urban sounds, smells, and physical changes in this case. The study proposed a novel, sensory experiences-based methodology to generate productive responses. We explored how a multisensory, humanistic, participatory, and mobile methodology could advance beyond traditional methods. The *senswalking*-based data characterised a place as sensory, multiple, subjective, and open. Static urban examinations cannot adequately respond to the actual sensory conditions in which people live.

Changes in technology, law, and city regulations have affected the spatiality of the Besiktas tobacco warehouse building. The building was renovated and converted. Once, people enjoyed this distinctive location, filled with boutique cafes, tea houses, and passageways, which have since transformed into a hotel-dominated urban environment. Local policies and municipal decisions have influenced the urban identity, spatial organisation, and cultural significance. These shifts altered both the place's intangible aspects and its physical features. The findings may reveal that after the function of the building and its peripheries changed, the limited sensory urban experiences diminished the place's intrinsic character. The new facade has disrupted its unique integration with the coast. The absence of people wandering about has dulled the lively atmosphere of the area. The latest transformation has negatively impacted the area's tangible and intangible dimensions and experiential

features. The renovation of the building has altered the characteristic landmarks that made Besiktas Square special. Therefore, we may refer to the hotel building as a *simulacrum* with no identity or unique connection to the area. The renovated version of the tobacco building is closely linked to losing the place's originality, resulting in its homogenisation like a *simulacrum*.

The study's approach was original; there had been no prior research on multisensory experiential qualities in the transformed urban landscape of the Besiktas neighbourhood in Istanbul. We observe that the *sensewalking* method proved beneficial, as the findings indicated that altering physical conditions impacted the sociocultural structure, necessitating that transformation projects of historical buildings be designed with consideration for the experiential qualities of the location. Because physical modifications have directly altered the area's sensory components, the sounds, smells, and tactile attributes are crucial for the urban landscape and can be regarded as elements of the city's cultural heritage. The findings were exceedingly valuable, leading us to believe that new sensory design guidelines could be established based on the data on the multisensory urban qualities of Istanbul's urban forms. The study could be integrated with further applications and renovation practices for cities across Turkey, with urban policies potentially considering sensory urban references. New sensory-based urban morphology principles might be introduced to design sensory placemaking. Local councils can devise innovative solutions for transforming historic and longstanding buildings by considering the sensory-spatial components of the urban landscape.

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