

Aesthetic atmospheres and their affordances in urban squares

Urban squares

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Abstract

Purpose – This study aims to explore aesthetic atmospheres and their affordances in urban squares to advance knowledge on the research and design of attractive living environments.

Design/methodology/approach – Descriptions of pleasant and unpleasant experiences of urban squares were collected using qualitative questionnaires with open-ended questions. The theoretical framework and the lens of aesthetic affordances were applied to pinpoint and understand the connections between the place attributes and experiences.

Findings – This study found four distinct aesthetic atmospheres formed by perceived synergies of both the material and immaterial aspects of the environment. It was also found that the atmospheres may shift. A model that shows the aesthetic atmospheres and their potential affordances as layered and emerging is presented.

Research limitations/implications – Everyday aesthetics considered as affordances open new research perspectives for the understanding of what generates attractive living environments – or not.

Practical implications – Aesthetics affordances may provide the design professionals and alike means on how to design places that engender specific aesthetic atmosphere.

Social implications – Gathering and discussing commonplace aesthetic experiences in everyday life may enhance democratic participation in place development among people with different levels of design expertise.

Originality/value – This study combines theories of place with a novel concept of aesthetic affordances to identify distinct aesthetic atmospheres. A holistic overview structure of how the various constituents of aesthetic atmospheres relate to each other provides new ways of studying and understanding urban aesthetic atmospheres.

Keywords Aesthetic atmosphere, Aesthetic affordances, Everyday aesthetics, Place design, Place innovation

Paper type Research paper

Introduction

Places are imbued with a certain feel, formed by characteristics and moods, which can be defined as *atmospheres*. Atmospheres consist of both material and immaterial aspects and can be understood as situated and fluid emerging synergies in a multi-layered environment ([Sumartojo and Pink, 2019](#)). Also referred to as affective atmospheres ([Anderson and Ash, 2015](#)),

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they are related to feelings and emotions. This paper explores people's experiences of urban squares and their atmospheres. As atmospheres are considered diverse, complex, abstract and tacit, they are experienced as challenging to study and describe (Thibaud, 2014; Anderson and Ash, 2015; Michels, 2015). Nevertheless, atmospheres are seen as valuable for understanding people's perceptions of the quality of life (Källström and Hultman, 2018; Stefansdottir, 2018) and guiding the changes in urban development to create more attractive places (Adams *et al.*, 2020). Furthermore, the perceived atmosphere has either a positive or negative impact on people's place experience (Slater and Koo, 2010), and when the atmosphere of a place is experienced as appealing, it attracts people and increases the duration of their stay (Thanasi-Boçe *et al.*, 2020). Thus, atmospheres are connected to aesthetics and the creation of the atmospheres can be considered as *new aesthetics* which concerns the relationship between environmental qualities and human moods (Böhme, 2017). In other words, new aesthetics can be understood as how it *feels* to be in a certain place.

However, professional designers still tend to mainly focus on visual aesthetics (de Winne *et al.*, 2020; Holt-Damant *et al.*, 2013, p. 14) further conclude that “[...] public spaces are usually designed only in terms of visual experience and that the engagement of other senses is generally not explored”. Furthermore, professionals generally evaluate and discuss aesthetics differently than the laypeople due to their knowledge and experience (Gifford *et al.*, 2002; Axelsson, 2011). Professional designers, for example, tend to discuss aesthetics in terms of proportion and relations among shapes and forms; they talk about order, harmony, rhythm, contrast and so on (Nia and Åtun, 2016) – a language that perhaps remains bit abstract for others to understand and identify with. Furthermore, in their practices design professionals generally use visual methods when developing and communicating their ideas. However, a picture of a place is not the same as an actual visit to the place, as Adams *et al.* (2020) demonstrate in their research, where they conducted “sense walks” to document smells and sounds – things that cannot be experienced by looking at pictures. This paper argues, in line with de Winne *et al.* (2020), that the design of urban places requires a change of mindset and a new approach to aesthetics to address the communication gap between urban design professionals and citizens.

The purpose of this paper is twofold:

- to increase the understanding of the constituents of urban atmospheres and to add to the recent studies from the perspective of new aesthetics to advance knowledge of design and development of attractive living environments; and
- to increase knowledge on methods for studying atmospheres by exploring whether a simple questionnaire is a sufficient method to provide relevant data about people's everyday experiences.

Urban squares in general were deemed suitable context for the study as they present a multifaceted everyday living environment accessible to various people. The study seeks to answer following questions:

RQ1. What distinct aesthetic atmospheres can be distinguished in people's descriptions of their experiences of urban squares?

RQ2. What attributes and aspects of the urban squares constitute these atmospheres?

The paper is structured as follows. To build a frame for the understanding of aesthetic atmospheres, the paper begins by presenting a view on place as complex system. Next, sensing everyday aesthetics is discussed, and the concept of aesthetic affordances is introduced. Thereafter, the research design and the findings are presented. Finally, the

theoretical and practical implications for design and management of urban places, as well as suggestions for further research, are discussed.

Urban squares

Place as complex system

How aesthetic atmosphere is understood depends on how the place is defined. The scholarly evolution of the understanding of place shows a development from the material, tangible aspects towards intangible aspects, such as feelings and atmospheres (Cresswell, 2015). To underpin the current study, the following section presents a brief overview of different perspectives on place.

Place as emotional relations

In contrast to mere geographic location, place, as an emotional relation, refers to the relationships between people and place – a significant basis for human experience and existence (Relph, 1976; Tuan, 1977). In urban design, Gehl's (2010) seminal work exemplifies how the design of built environment creates a basis not only for human behaviour but also for the quality of life. The quality can be observed, for example, in the distinguishing characteristics of different neighbourhoods and their impact on people's lives (Stefansdottir, 2018). Some parts of the city become tourist attractions, other parts desirable areas for living and yet other areas people wish to avoid entirely. These tendencies also demonstrate that places can be understood in terms of shared values, norms and assumptions (Cresswell, 2015). Other recent studies have focused, for instance, on the “soul” of a place, about how integrated, happy and proud people feel about their surroundings (Haårsman Wahlström *et al.*, 2020) and how the qualities of specific place relate to social, economic and environmental values, as well as health (Carmona, 2019).

Another earlier example of a study on emotional relationship between people and places was carried out by Russell and Pratt (1980) in the field of environmental psychology. They asked people to rate a range of various indoor and outdoor places using preselected, commonly used adjectives to describe places and then to rate their place experiences on scales of pleasure, arousal and dominance. Their study resulted in four main emotional qualities connected to places: arousing, pleasant, sleepy and unpleasant (see Figure 1). In their model, the concepts “exciting”, “relaxing”, “gloomy” and “distressing” are seen as combinations of their neighbouring qualities. For instance, relaxing combines pleasant and sleepy. The words within the circle show the commonly used adjectives to describe the emotional quality of places.

Place as synthesis

As described above, places contain overlapping relations both within the material borders of a place and outside them. These relations provide the basis for the flow of diverse influences, such as people, ideas and memories that form various combinations (Cresswell, 2015). Describing places as dynamic combinations of relations is found, for instance, in *place innovation*, where place is understood as a synthesis of its built environment (configuration), events and services (content) and marketing (communication), which in turn is considered related to the identity of the place (Lindberg *et al.*, 2017, 2019, 2020). Innovative synergies among configuration, content and communication are formed by, and form, the identity of a place in terms of its geography, history, values and resources (*ibid.*). In other words, the style and design of buildings and their surroundings enable certain activities, experiences and feelings (cf. Gehl, 2010; Haårsman Wahlström *et al.*, 2020) that make a place unique (see Figure 2).

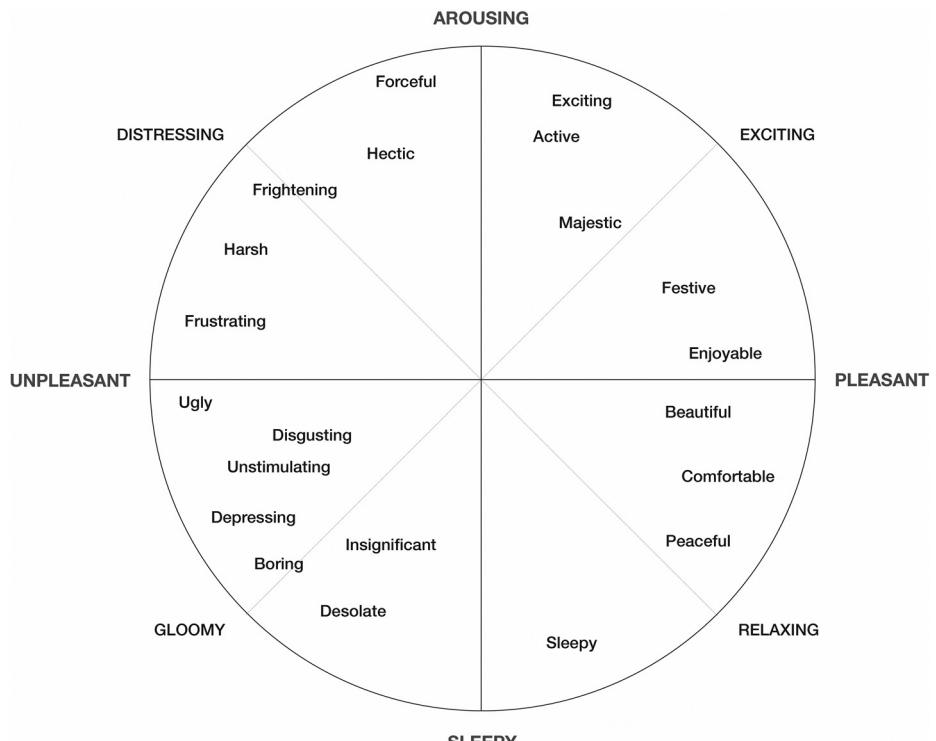
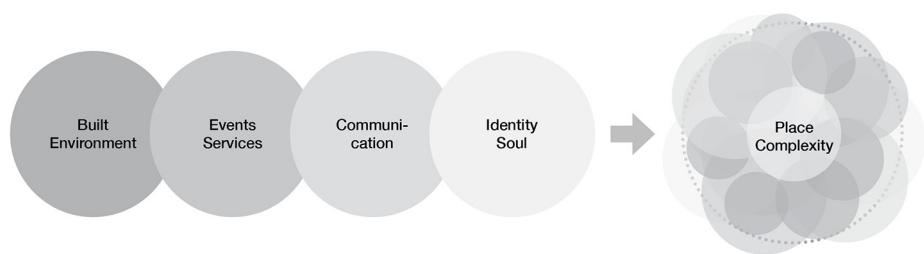


Figure 1.
Affective quality of places according to the Circumplex model of affect

Note: Adapted from Russell and Pratt (1980). Illustration: Minna Eronen

Figure 2.
Various place qualities build upon each other to result in an interplay that makes a place a unique complex system



Note: The dotted line visualises the material borders of a place. Illustration: Minna Eronen

Sensing everyday aesthetics

“Cities are more than the built and lived environment. They are places full of sensory impressions and sensory stimuli” (Schreiber and Carius, 2020, p. 26). These sensory impressions are perceived through “sensing” (Haapala, 2005), that is, experiencing and getting to know a place through the various senses. Sensing is closely connected to the notion of everyday aesthetics where ordinary artefacts, activities and events in people’s daily lives are experienced through various senses (Saito, 2007). Sensing can provide an

inclusive perspective as a language for various people to express how they perceive their living environment as everyday aesthetic qualities are present in peoples' daily life, "[...] regardless of their identity, occupation, lifestyle, economic status, social class, cultural background, and familiarity with art" (Saito, 2021, para 4). Thus, sensing "[...]" related to affective tonalities and ways of being together in a situation" is crucial for dealing with and understanding atmospheres (Thibaud, 2014, p. 2).

These sense experiences can roughly be defined as either pleasant or unpleasant. Thus, the aesthetics of a place also "includes within its purview those qualities that pervade everyday experience, such as pretty, cute, messy, gaudy, tasteful, dirty, lively, monotonous, to name only a few" (Saito, 2021, para 4). According to Berleant (2011), negative aesthetics are, on the one hand, caused by the lack of the positive aesthetics and, on the other hand, the presence of negative aesthetic factors. Furthermore, it is crucial to experience the negative aesthetics as negative to be able to improve things (*ibid.*). Thus, aesthetics in the daily life, play an "active part in the constantly ongoing process of defining and redefining what is valuable, meaningful, and thus desirable—and what is not" (Vihanninjoki, 2021, p. 468; Schreiber and Carius, 2020) hold that sensing opens for imagining the future in a way that leads to positive visions that meet the human needs. Furthermore, as sensing does not require any specific education, it is an inclusive approach in which everyone can participate. It also enables people to break thinking patterns and think in new ways about the future possibilities (*ibid.*). These points demonstrate the key aspects of the under-utilised potential of everyday aesthetics as inclusive tool in urban place design.

Aesthetic affordances

To further concretise how the everyday aesthetics may be used as a resource to inform the design of attractive living environments, a tentative concept of *aesthetic affordances* (Eronen, 2019) is proposed. In this view, aesthetic affordances combine the theory of affordances developed by Psychologist James Gibson (Gibson, 1968, 2015) and the theory of aesthetic atmospheres by Philosopher Gernot Böhme (1993/2017). According to Gibson (Gernot Böhme, 1993/2017), affordances are the directly perceivable possibilities or opportunities for bodily actions and/or emotions that the environment provides. These can be either positive or negative. Furthermore, affordances are properties of both the environment and the perceiver, and thus both objective and subjective, yet neither, as they come into existence at the meeting of the two (*ibid.*). This can be further understood through the idea that "the primary 'object' of perception is the atmospheres" (Böhme, 2017, p. 72) and that the atmospheres, in turn, are created by the "ecstasies" of the thing:

I use the Greek word ecstasies to indicate the way things are radiating into space and thus contributing to the formation of an atmosphere. Ecstasies is the way things make a certain impression on us and thus modifying our mood, the way we feel ourselves. (Böhme, 2017, p. 28)

"Ecstasies of things" or "the way of being present", like affordances, share a mutuality between the perceived and the perceiver. Thus, they are essential in the design and development of urban environments in terms of understanding *what* creates and enhances positive everyday experiences. And more importantly, *how*. A public park that lacks lighting, where the benches are broken, rubbish strews the lawn and pathways are paved with uneven cobblestones, is hardly experienced as safe, welcoming, pleasurable or relaxing as it presents itself as rundown and radiates what may be experienced as an overall atmosphere of neglect.

Based on Gibson's thinking combined with Böhme's thoughts, the key idea is that the way of being present is the mediator of aesthetic affordances as it carries the subtle aspects

of the place complexity, which in turn opens for the possibility to perceive aesthetic atmospheres and experiences, as exemplified in [Figure 3](#).

Similar thoughts regarding the layered nature of affordances have been presented by others. [Vihanninjoki \(2020\)](#), conclusions, para 1) talks about place experiences in which the place character constituting “atmospheric affordances can be seen as second-order affordances that stem from but are not determined by first-order functional affordances and their material bases”. This principle can also be observed in a study by [Ganji and Rishbeth \(2020\)](#), according to whom spatial affordances for sitting, such as furniture, grass and ledges, as well as configurations offering interesting views, enhance participation in public life and thus a sense of belonging. Similarly, [Nissen et al. \(2020\)](#) found that transport possibilities and green space afforded social inclusion and belonging, independence, physical comfort and security, as well as health and well-being in young people. These examples further illustrate that the built environment and its services provide not only possibilities for bodily actions but also offer possibilities of aesthetic experiences on a non-material level.

Design of aesthetic atmospheres

The concept of aesthetic affordances helps to further understand how, through conscious design choices, combinations of various place attributes can form intended and meaningful atmospheres that provide positive everyday aesthetic experiences. In retail and marketing, atmospheres have been created as a long time to communicate and enforce a company's brand image as well as evoke affirmative feelings in the customers ([Kotler, 1973](#)). Businesses and alike use colours, materials, music, lighting and scents to create atmospheres to attract their target customers and make them feel welcome and that they belong ([Kuruoğlu and Woodward, 2021](#)). Sometimes aesthetic atmospheres are designed to convey a more alluring image than the reality might be ([Biehl-Missal and Saren, 2012](#)). One example of this is greenwashing where people are led to believe that a company or a city is more environmentally friendly than they actually are. Sometimes atmospheres are even designed to exclude certain people ([Thörn, 2011](#)). Even though the atmospheres can be objectively produced by carefully combining certain elements, they need to be subjectively experienced to truly come to life ([Bohme, 2017](#)). People are unique individuals. Their past experiences and future expectations play role in how they both create and experience atmospheres ([Steadman et al., 2021](#)). Consequently:

[...] atmospheres themselves cannot be designed; rather, the role of design is to create interventions that make possible the circumstances through which particular types of atmospheres might emerge, but alone it cannot predetermine or predict exactly what these atmospheres will be experientially. ([Sumartojo and Pink, 2019](#), p. 95)

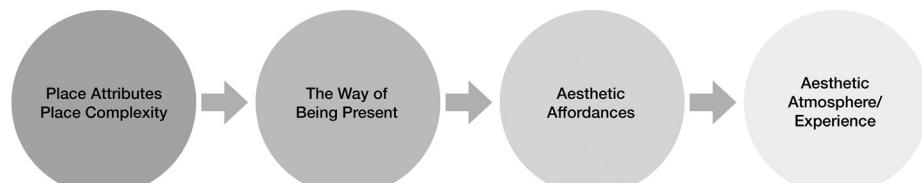


Figure 3.

Aesthetic affordances are mediated by way of being present

Note: Illustration: Minna Eronen

Thus, it is impossible to design atmospheres that feel pleasant and inclusive to everyone. Therefore, designers should develop their own sensitivity and knowledge on atmospheres. Increased awareness may also reduce the risk of unintentionally designing aesthetic atmospheres that may most probably feel generally unpleasant/excluding to most people.

Urban squares

Method

Affective aesthetic atmospheres are considered challenging to study, describe and present in words (Anderson and Ash, 2015; Michels, 2015). To deal with this problem, Anderson and Ash (*ibid.*) propose to consider the emergent causality of atmospheres and how multiple non-human artefacts may influence atmospheres. In the current study, the idea of aesthetic affordances and the way of being present was applied to serve that purpose. Another way to deal with the difficulty was to differentiate between studying atmospheres and studying the production of atmospheres as proposed by Böhme (2017): When the object of study is the atmosphere, then exploring people's experiences and moods is appropriate, as expressed in the RQ1: *What distinct aesthetic atmospheres can be distinguished in people's descriptions of their experiences of urban squares?* When the production of atmospheres is of interest, then the various artefacts and their specific qualities should be the focus to understand what generates specific atmospheres (Böhme, 2017), as expressed in the RQ2: *What attributes and aspects of urban squares constitute these atmospheres?*

In contrast to methods applied in previous studies, such as in-depth interviews (Källström and Hultman, 2018; Stefansdóttir, 2018), ethnographical walks and detailed observations on site (Adams *et al.*, 2020) and complex surveys including several images and questions (Thanasi-Boçe *et al.*, 2020; Subiza-Perez *et al.*, 2020), this study tested whether a simple open ended qualitative on-line questionnaire with few questions could be a sufficient method to provide appropriate and usable data on peoples experiences and aesthetic atmospheres. The rationale for this was that the municipalities and alike may find this kind of simple method feasible for citizens' dialogue as it is easy to conduct, time efficient and does not require any advanced research skills.

Generally, the ability of questionnaires to produce multifaceted in-depth information is questioned as the emotional aspects may get lost as the researcher cannot observe the non-verbal language and discussion is not possible (Clore *et al.*, 2004). However, Beckett and Clegg (2007, p.316) state that qualitative questionnaires can provide rich and thick data – sometimes even more so than face-to-face interviews: "We would argue that in many cases, the factor interesting to research is not *what* is true, but *which* truth is presented". This claim can be understood connected to the fact that the respondents cannot ask follow-up questions and therefore need to interpret by themselves what is asked for. This in turn may result in different understandings of the questions and therefore bring about new perspectives. In other words, the absence of the researcher may reduce bias as the researcher's presence is not influencing the situation (Clore *et al.*, 2004). Furthermore, when questionnaires are distributed electronically, it gives the respondents the possibility to answer when it suits them the best and reflect on their answers and control what is documented (Beckett and Clegg, 2007).

Three simple questionnaires were created for this study. Two targeted the population in general and one was aimed at urban design professionals (see Table 1). Professional urban designers were broadly defined as various professionals who work in shaping the urban built environment (Carmona *et al.*, 2010). In this study, they included plan architects, landscape architects and engineers.

In addition to age and gender, the following questions were asked in all questionnaires:

- Q1.* Tell us about a square – in Sweden or elsewhere in the world – that gave you a pleasant experience. What made the place feel good?
- Q2.* Tell us about a square – in Sweden or elsewhere in the world – that you found unpleasant. What made the place feel that way?

The first part of the questions aimed to get information about the atmosphere and the second part aimed to understand what constitutes the atmospheres (cf. Böhme, 2017). To gain an understanding of how professionals view aesthetics in their occupation, they were also asked to describe what aesthetics means in their daily work.

Snowball sampling was applied to allow for certain randomness: the researchers initially contacted people within their own networks and asked these to forward the questionnaire within their networks (cf. Parker *et al.*, 2019). The sampling finished when the target of 100 answers for Q1 and Q2 was reached. The target of 100 was set based on a time limit and what was deemed achievable and sufficient for the purpose of the study. In Q3, the sampling was completed when the set timely deadline was reached. A total of 12 answers was received. The number is lower than ideal or expected. This was most probably due to the designers not forwarding the questionnaire. However, the number of answers was deemed sufficient for the purpose of this study. Furthermore, as this study does not claim to be quantitative, the sample of total 113 respondents it is deemed to be sufficient and a reliable provider of knowledge for the explorations undertaken in this paper. Overall, 60% of the respondents were females. In Q2, 50% of the respondents were 25–34 years old. In Q1, no age group was significantly dominant. In the overall findings regarding the atmospheres, no significant differences could be seen related to gender or age, other than that Sergelstorg in Stockholm was referred to as an unsafe and unpleasant by women over 65 in 5 answers and by men over 45 in 4 answers.

A thematic analysis (Braun and Clarke, 2021) was conducted to construct defined themes within the pre-defined categories of pleasant and unpleasant experiences. Firstly, the data, that is, the written descriptions of perceptions of urban squares, were collated into PDF files. The files were then printed and processed manually. During the first reading and re-rereading of the data, the initial ideas and thoughts were noted, and topics repeatedly appearing in the data, i.e. the initial codes, were marked by using different colours (see Table 2).

The initial coding revealed two distinct themes within the main categories. Pleasant was experienced either as lively or calm and unpleasant as overwhelming or boring. As this clear pattern started to emerge, the themes were refined by using guiding questions based on the theoretical underpinnings to further scrutinise the data. Place theory (see Figure 2) helped to analyse how the themes related to the levels of places: built environment, events,

Table 1.
Overview of
respondents

Questionnaire target group	Primary countries	Answers total	Gender dominance	Age dominance
<i>Q1</i> General population	Sweden	46	Female 29	None
<i>Q2</i> General population	Finland, Germany, the Netherlands, Spain, Singapore	55	Female 34	25–34 y/o 18 Female 11 Male
<i>Q3</i> Urban design professionals	Sweden	12	Female 7	None

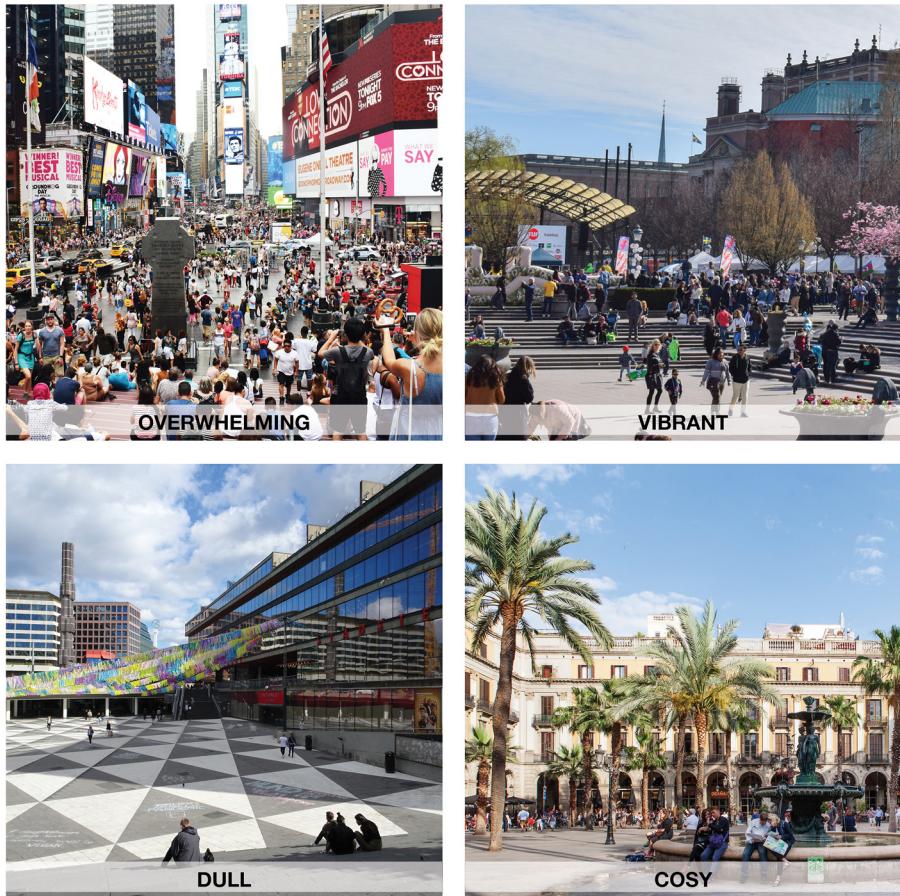
Code	Quotes	Urban squares
<i>Pleasant</i>		
Human scale	Not too open but also not too compacted and closed. I like Kungsträdgården (Stockholm, Sweden) because it gives an overview yet is compartmentalized to not feel unsafe and vast. The flower trees help too)	
Lively Greenery	This square was in Barcelona and it made me feel happy to sit with my friend and watch people go by as we ate outside. There were trees and benches and outdoor cafes. There were apartment patios with older people sitting at the windows watching also. There were young people with skateboards and sitting with their partners	
Eateries		
Variety of people		
Quiet	Old town square in Munich Germany. A cosy traffic free quiet place in the midst of AL fresco restaurants	
Sheltered	Merkouri square in Athens. It's a small cosy square surrounded by bars and restaurants. It has plenty of sitting space in a circular arrangement that gives the feeling of being part of a group	
Clean	Friendly people, pollution free, having enough green space, tidy and clean	
<i>Unpleasant</i>		
Code	Quotes	
Non-human scale	San Marco square in Venice - the size of the square is huge and there is no sense of scale in it. I couldn't find myself comfortable being in the square, I just went to the sides	
No life, empty	No people around. Eerie feeling looking like a scene from a zombie movie	
Crowded	The feeling of the plaza is that it feels dead with no life. square name: Plaza del pilar, Zaragoza, Spain	
Noisy	Banegårdsplassen, Aarhus: the square is crowded and busy, and is cut in half by a major traffic road	
No seating	Noisy, crowded, big, not inviting - in sense of no place to sit or stand, not secure, no lights in the night, no shade in the sun, too much traffic	
Too many impressions	Times square in NYC, way too many impressions and even though that's kinda the thing about it - I just felt overwhelmed	
Unsafe	Sergelstorg (Stockholm, Sweden). Unsafe, sterile place	
Dirty	Järntorget, Gothenburg (Sweden). Not cosy, too much traffic Polluted air, dirty, untidy	

Table 2.
Initial codes

communication and identity. The theory of the aesthetic affordances helped to understand how the respondents described the presence of the things and the connections between the levels of places. The analysis resulted in four aesthetic atmospheres: overwhelming, vibrant, dull and cosy, including their affordances. To outline the findings, a framework combining “circumplex model of affect” (Russell and Pratt, 1980) and the idea of aesthetic affordances, was created to show how built environment (configuration) and events and services (content) influence the place atmosphere (see Figure 5).

During the analysing process, an image search of the squares mentioned in the answers was conducted to enhance the understanding of the respondents’ descriptions. Four images were chosen to visualise the distinct atmospheres (see Figure 4). To enhance the comparability between the images, they depict a similar scale, perspective, season and lighting. To validate the choice of the images, they were shown to seven visual design teachers (two men, five women) and three industrial design teachers (two men, one woman). The design teachers were chosen based on convenience sampling: some of them are colleagues to the author and some participated, together with the author, in a workshop that explored practice-based design research. They were asked to describe the atmosphere and what they perceive contributes to it. In addition, they were asked if they have visited the place in the picture or a similar place, which everyone had. These questions aimed at

Figure 4.
Visual impressions of the aesthetic atmospheres mediated via example squares.
overwhelming (Times square/Chris Barbalis/CC Unsplash); *vibrant* (Kungsträdgården/Liridon); *dull* (Sergelstorg/Holger Ellgaard); and *cosy* (Plaza de Reial/Ramblasbacardi/CC 4.0 Wikimedia Commons)



gaining an understanding of whether their answers were based purely on the visual evaluation or perhaps also on a memory of an actual experience. The teachers provided similar descriptions as found in the survey answers which confirmed the images as appropriate to express the four main atmospheres found in this study.

Findings

Aesthetic atmospheres and their affordances

Four distinct aesthetic atmospheres, *overwhelming*, *vibrant*, *dull* and *cosy*, could be defined based on the empirical data gained in this study (see Figure 4).

Figure 4 aims to give the first impression. However, mere visual presentations of aesthetic atmospheres may create misleading conceptions as they are based on what we see from a certain angle in a frozen moment of time. Therefore, the aesthetic atmospheres and their affordances found in this study are presented, organised and summarised in the model of aesthetic atmospheres and their affordances (see Figure 5) which enhances the understanding of atmospheres as multidimensional. The inner circle shows qualities typically related to

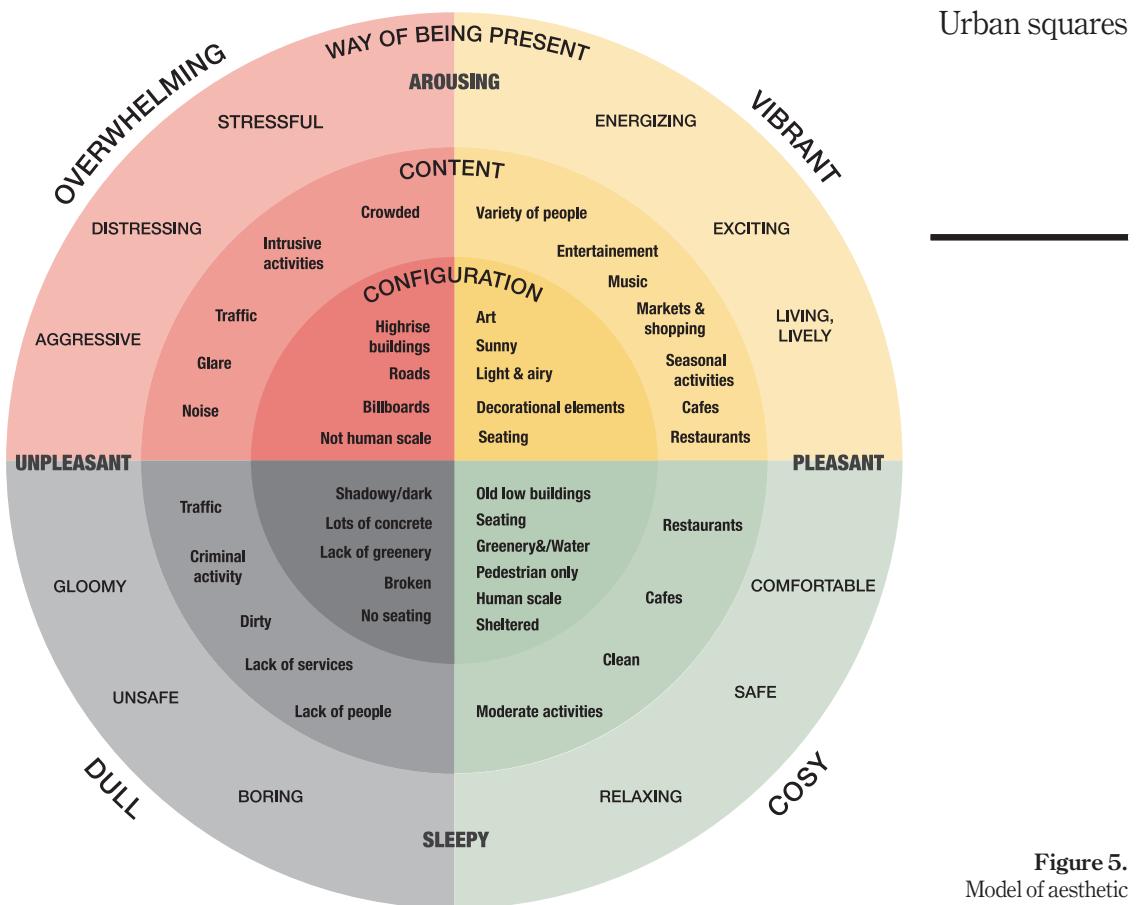


Figure 5.
Model of aesthetic atmospheres and their affordances

Note: Illustration: Minna Eronen

configuration of a place, and the next circle shows qualities typically related to the content. These entangled combinations of qualities include aesthetic affordances and describe the respondents' reasons for their pleasant and unpleasant experiences related to urban squares (cf. Eronen, 2019). The outer circle visualises the sub-themes for the aesthetic atmospheres.

In the following sections, the atmospheres are further described based on the empirical findings and analysed in relation to existing literatures.

Overwhelming. An overwhelming atmosphere builds up through the possibilities for several strong simultaneous sense experiences which can be experienced as stressful and unpleasant: overly loud music, car traffic, smell of litter and many visual impressions. An overwhelming place does not allow one to simply be:

Piazza del Duomo (in Milano, Italy, author's comment)—constant aggressive approach of people trying to sell bird seeds, photos of you, or other knickknacks. Crowded in a touristy, not an urban way. And loads of pigeons flapping around, shitting everywhere. (Female, 35–44)

As seen in the description above, people and their activities play a role in the aesthetic atmosphere of a place (cf. [Slater and Koo, 2010](#)). In the current study, people were explicitly mentioned by 50 respondents. In relation to a dull atmosphere, it was the lack of people. In vibrant and cosy, the presence of other people was experienced as positive as it enhanced the feeling of safety and provided other pleasant experiences, such as entertainment. Designers cannot of course design how people behave, but they can design places that encourage and enable certain types of behaviours (cf. [Gehl, 2010; Ha^rsman Wahlström et al., 2020](#)).

An overwhelming atmosphere may also be afforded by the built environment. Several respondents referred to the scale of the square as significant for their experience. In relation to overwhelmingness, the place feels too large to have control over as it is not harmonising with the limits of human sensory system ([Thibaud, 2014](#), p. 2):

The large scale of the square makes you feel small, and you lose contact with other people [...] and the interaction with the surrounding buildings. (Planning architect 25-34, male)

An overwhelming place may be surrounded by high-rise buildings and billboards and have roads surrounding or cutting through the place which also contributes to sensory overload. In sum, an overwhelming atmosphere is characterised by excessive presence of negative aesthetics ([Berleant, 2011](#)).

Dull. A dull atmosphere is characterised by monotonous emptiness. It does not stimulate the senses by offering various rich sense experiences ([Saito, 2007](#)):

Several squares where the square is large and empty, for instance the Stora torget in Västerås (in Sweden, author's comment). It lacks water, decorations, creative seating, greenery. (Female 25-34)

Traditionally urban squares have been designed for markets or larger gatherings leaving them empty when not filled with specific activities ([McGillivray et al., 2022](#)). As these squares are often quite big, and sparsely furnished, they are experienced as unpleasant when vacant. Thus, the desire to keep them open for events contributes to dullness. Furthermore, the absence of people probably has to with that people do not experience the place offers reasons to stay and spent time ([Slater and Koo, 2010; Thanasi-Boç^e et al., 2020](#)) which in turn reinforces the dullness. Thus, the dullness of a place is often enhanced by negative aesthetics connected to architecture, materiality and furnishings, for example by the extensive use of concrete, limited colour scheme, the lack of seating and services. Additionally, general neglect and lack of maintenance make a place feel dull and uninviting, according to respondents. In summary, the everyday aesthetic experience of a dull place is afforded by the lack of the uplifting pleasant aspects ([Berleant, 2011](#)).

Cosy. A cosy atmosphere comes into being through possibilities for several calming and relaxing sense experiences. An atmosphere of cosiness, tranquillity and absence of noise increases the citizens satisfaction with their living environment ([Källström and Hultman, 2018](#)). Typically, these seem to be afforded by the smallish size of the place and moderate number of people and activities, according to findings in the current study. The activities and services provided, are experienced as relaxing, rather than exciting. A cosy place is also a car-free place. Furthermore, it offers seating and something pleasant to look at, such as greenery, water features or historic buildings:

Atmosphere, green, places to sit, water, inviting, comfortable, small/cosy, nice architecture, pedestrian! (Female 18-24)

A cosy place evokes the feeling of being embraced. The scale and style of surrounding buildings make the place feel sheltered, which adds to the cosiness. In addition, the combination of various qualities related to a slowed pace, relaxation and comfortable sense

experiences enhances the cosiness. Barros *et al.* (2021) argue that adding elements of nature and other decorative elements, sheltered seating areas, reducing noise and keeping the area clean and well-maintained, not only enhances attractiveness but may also restore people's well-being. To summarise, the everyday aesthetic experience of a cosy place seems first and foremost afforded by the configuration of the place such as human scale, low rise architecture, historic buildings and elements of nature (cf. Stefansdottir, 2018).

Vibrant. Vibrant atmosphere is characterised by lively energy. Various positive sense experiences afforded mainly by the content of the place evoke the feeling of participation, which in turn creates the feeling of being alive:

People taking part, buskers, food market, limited vehicle access, souvenirs, shopping, seating, walkable, accessible, lots of open space, clean, friendly street furniture, pleasant architecture and views (e.g., park, lake, or waterway), good drainage, public toilets, limited cycling. (Male 55-64)

As summarised by the respondent above, a vibrant place provides plentiful of services. The actual scale of the place does not seem to be significant, as the places that could be interpreted as vibrant in this study varied from the relatively small, such as Hötorget, (Stockholm, Sweden) to quite big, such as Place de la Comédie (Montpellier, France). Thus, in line with previous studies, it seems that the services and amenities may be considered the most defining feature of a vibrant atmosphere (cf. Stefansdottir, 2018). Consequently, the configuration is seen as secondary; however, it provides the basis that enables certain activities and atmospheres (cf. Gehl, 2010, Haarsman Wahlström *et al.*, 2020). Seating areas, or areas where one can comfortably stand, are considered important as observation points as they enhance feelings of participation (Gehl, 2010), which the respondents in this study consider a core experience in a vibrant place. In sum, the everyday aesthetic experience of a vibrant place atmosphere is a dynamic combination of various positive elements related to the pleasures of life and living (Saito, 2007).

Nuances of aesthetic atmospheres

In line with previous studies, the findings of this study indicate that the aesthetic atmospheres of places are not static, but rather fluctuant (cf. Sumartojo and Pink, 2019). They change with the seasons, people and time of the day (Adams *et al.*, 2020). In this study, these changes are primarily understood as relations between the fixed built environment, i.e. the configuration of a place, and the flexible events and services, i.e. the content as well as environmental influences:

A city square can be pleasant even if it is empty and unfurnished, or even if it is a parking lot, when it is surrounded by beautiful buildings, or when there are people around. But if it is not surrounded by beautiful buildings, there needs to either be people, or the place needs to be well-designed and maintained, to not feel unpleasant. (Planning manager, female 44-54)

The seasonal changes are considered significant factors for atmosphere, especially in Scandinavia. In the summer, the dull or overwhelmingly big empty squares often become filled with people and activity, such as "small pop-up stalls that enliven the place somewhat" as a responding planning architect described.

Furthermore, the findings show that same place may be experienced differently by the same person: a female respondent (35-44) described how, in her experience, a usually dull Smithfield Square in Dublin transformed into an energetic atmosphere and experience during a festival. Thus, the change in the aesthetic atmosphere of the place occurred due to a change in the content of the place. In another example, different respondents described differing experiences of the same place: while some respondents experienced Times Square,

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New York, as pleasant and vibrant, others found it unpleasant and overwhelming. This can be seen as an example of personal preferences. Similarly, [Stefansdottir \(2018\)](#) found the same place described as vibrant by some and hectic and stressful by others. Stefansdottir also related this to respondents' personal preferences. To summarise, the findings indicate that the nuances of the aesthetic atmospheres may primarily be created through the changing content of the place. The findings also confirm that atmospheres cannot be fully designed due to peoples' individual perceptions (cf. [Sumartojo and Pink, 2019](#)).

Aesthetics in urban design

Aesthetics, in this study, is simply defined as ordinary, everyday experiences related to interconnected aspects of one's surroundings, gained through various sense perceptions ([Saito, 2007](#)). However, as discussed in the introduction, previous research indicates that the professional designers tend to focus on the visual aesthetics only (cf. [Nia and Atun, 2016](#); [de Winne et al., 2020](#)). In the current study, the responding urban design professionals described aesthetics as related to configuration, content and peoples' experiences:

Experience for the people. What does the place convey? Who is allowed to spend time there? Does the place contribute through form, function, and design to a specific direction, or is it dynamically creative, to interpret and understand the experience that the built environment creates? (Planning architect, female 25–34).

Furthermore, "the configuration of a public place should generate the desired function of the place in an organic way" (Landscape architect, male 35–44). These answers highlight the significance of aesthetics as the interplay of various aspects of a place and the people. This view aligns with a previous understandings of the role of the people as the creators of atmosphere ([Slater and Koo, 2010](#)). It also points out to the possibility to use aesthetics as power tool to exclude people ([Thörn, 2011](#)). On a more optimistic note, aesthetics can be used as means to activate people and create a positive impact:

Aesthetics is about contributing to a good built environment. Aesthetics as architecture, planning, and landscape architecture, as well as public art, is an important tool to make the living environment interesting, so that people want to take part in public life, to develop the identity of the city, and create pride among the citizens. (Planning architect Male, 25-34)

Instead of merely focusing on the visual aesthetics, the responding professional urban designers defined aesthetics in their daily work in terms of the feel of the place (cf. [Carmona et al., 2010](#)). However, the focus on place experiences in the survey may have had influence on the answers. Thus, other methods, for instance observations of daily practices, may have resulted in different findings.

Concluding discussion

Aesthetic atmospheres influence how people perceive places ([Sumartojo and Pink, 2019](#)). To enhance the knowledge of aesthetic atmospheres and their role for the design of attractive living environments, the current study set out to explore what constitutes urban aesthetic atmospheres and how the atmospheres can be studied. The findings and ideas presented in this paper have several theoretical and practical implications.

Firstly, they offer a way to explain the complexity of the aesthetic atmospheres. In previous studies on place attraction and quality, atmospheres have been defined connected to material and immaterial place attributes of the place ([Källström and Hultman, 2018](#); [Stefansdottir, 2018](#); [Thanasi-Boçe et al., 2020](#)). To further concretise and provide a structured view on these perspectives, the current study combined theories from various

fields, namely psychology (Russell and Pratt, 1980; Gibson, 2015), philosophy (Böhme, 1993/2017) as well as various understandings of place (Cresswell, 2015; Lindberg *et al.*, 2017, 2019, 2020) to build a theoretical framework to organise the factors that form aesthetic atmospheres. The current study identified various aspects and attributes related to the built environment (configuration) and the services and events (content) and provided a structured visual overview to clarify the layered and causal aspects of aesthetic atmospheres. Here it is important to once more point out that even though some attributes may be more dominant or influential in forming aesthetic atmospheres, aesthetic atmospheres are combinations of several factors. Thus, the findings also further clarify the concept of aesthetic affordances (Eronen, 2019). In relation to places, aesthetic affordances can be defined as possibilities for aesthetic experiences embedded in various aspects of the attributes of the configuration and content of a place. In other words, the way the various constituents of a place present themselves and how this presence is experienced. Thus, the concept of aesthetic affordances also highlights the significance of the perceiver in how atmospheres emerge and how they continue to exist – or not. This further illustrates how the complexity of aesthetic atmospheres also includes temporal perspectives in terms of past events and experiences as well as future aspirations (cf. Steadman *et al.*, 2021).

Secondly, the study provides insights on how atmospheres can be studied. Previously, atmospheres have been considered challenging to study due to their complex nature (Thibaud, 2014; Anderson and Ash, 2015; Michels, 2015). Following the advice of Anderson and Ash (2015) to explore emerging complex causalities to reduce the risk of simplifying the atmospheres, the current study analysed people's aesthetic experiences and most crucially, the reasons behind them, to understand how atmospheres come into being. The findings of this study demonstrate that a simple qualitative questionnaire can function as a springboard for gaining relevant knowledge about citizens' aesthetic place experiences. Consequently, it is proposed that municipalities and design studios could benefit from using similar questionnaires as the first step to include the citizens in the dialogue about their living environment to understand what places are experienced as pleasant or unpleasant and why. This could reveal areas in need of improvement and help municipalities to prioritise areas for further development. Furthermore, as the model of Aesthetic Atmospheres and their Affordances (Figure 5) helps to articulate and describe constituents of aesthetic atmospheres, it may prove to be a viable tool for both researchers and practitioners to analyse existing places and their aesthetic atmospheres, which in turn can enhance the knowledge on how to conceptualise and create varied urban environments that fulfil several needs.

Thirdly, the methods suggested in this paper may improve democratic design practices. However, as previously discussed, aesthetic atmospheres cannot be fully designed as they require a senser who experiences the complex synergies created by interplay of various factors (Sumartojo and Pink, 2019). The findings of the current study indicate that when focusing on concrete experiences of lived situations, people have the possibility to become aware of the place aesthetics on a deeper level than visual only and participate in discussions about places and place qualities as experts of their own experiences (Saito, 2021; Schreiber and Carius, 2020). Consequently, the model presented in the current study may provide valuable inspiration for professional designers and to broaden their horizons as well as offer potential to fill the communication gap between design professionals and citizens (cf. de Winne *et al.*, 2020). Furthermore, as both laypeople and professional designers accounted for similar language in their descriptions, the findings support the “*democratization* of culture” (Böhme, 2017, p. 30 *italics in original*) by offering potential and means to aid shared discussions regarding the aesthetic quality of public space – discussions where various participants can feel competent regardless their professional background (Saito, 2021).

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Citizens' and consumers' increased awareness of what creates aesthetic atmospheres may also empower and encourage them to take their own initiatives to improve their living environments ([Biehl-Missal and Saren, 2012](#)).

Fourthly, the ideas presented in this paper may inform decision-making about the design and management of living environments. They may help various policymakers, place developers and managers to understand the possible consequences of their decisions. Therefore, the lens of situated aesthetic affordances and atmospheres can become means for evaluating urban environment: the model proposed can be applied in analysing the urban environments to understand the less tangible place qualities seen as challenging to research, as [Carmona \(2019\)](#) has pointed out. These kinds of evaluations can generate meaningful information about place value and place quality in various contexts such as place branding and destination design ([Källström and Hultman, 2018](#)). As the perception of the sensory qualities of the place influences people's behaviour, the method presented in this paper may be used to increase the understanding of residents' and visitors' preferences to help to understand how the places ought to present themselves to appeal to as many as possible. In addition, the model may further inform the policymakers, place developers and managers how to create conditions for more cohesive and context-appropriate, holistic aesthetic atmospheres.

Finally, the findings complement the knowledge on people's everyday aesthetic experiences related to well-being. In line with previous studies, the findings point out that aesthetic atmospheres have a significant impact on people's place experience. They enhance the feeling of being welcome and belonging ([Kuruoğlu and Woodward, 2021](#)) and in turn the perceived quality of life ([Källström and Hultman, 2018; Stefansdottir, 2018; Barros et al., 2021](#)). The current study shows that, the pleasant aesthetic atmospheres relate to positive feelings such as relaxed, calm, cheerful and lively. Consequently, public places that are experienced as pleasant may attract people to spend time outdoors, which enhances both mental and physical well-being ([Tavares et al., 2020](#)). Furthermore, design efforts towards cosy and vibrant atmospheres may also enhance sustainability as they include greenery and water features which is understood to enhance positive local microclimate (*ibid.*). Thus, the creation of pleasant aesthetic atmospheres can support United Nations Sustainable Development Goals of good health and well-being, sustainable cities and communities, as well as climate action.

To conclude, this paper has provided insights on how aesthetic atmospheres, understood as multi-layered sense-based experience of places, may serve the design of attractive living environments. The current study indicates that aesthetic atmospheres and their affordances may provide a shared language to involve citizens in discussions about the aesthetic quality of their living environments, which in turn may enhance collaborative design efforts. However, more research especially focusing on the later stages of design process is needed to provide more nuanced insights regarding co-design and evaluation. Furthermore, it is by no means suggested that the model of aesthetic atmospheres and their affordances is complete in terms of the various place attributes. Rather it is to be understood as inspiration for further research and consequently, other attributes may be added. Future research could explore aesthetic atmospheres and their affordances in other contexts both outdoors and indoors, perhaps schoolyards and classrooms to study children's perspectives. Finally, as this paper, in a way, only offers second-hand knowledge of aesthetic atmospheres, it ends with a practical proposal for the reader. The reader, presumably a researcher or practitioner in the multiplex field of urban design, is encouraged to visit places to gather direct experiences and first-hand knowledge to establish for themselves whether the findings presented in this paper seem valuable, viable and valid for urban design and placemaking. Visiting places also enables learning situated sensing, which can be valuable tool in place design and place development.

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