

The pleasure of walking:

User experience in the urban space

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Abstract: Micro-scale needs related to the citizens' daily experiences within the public space have to be taken into consideration in strategic urban planning. Such needs are associated to the users' well being – pleasure towards security, usability, aesthetic of streets and other public equipment. Therefore, this paper presents an exploratory research on the pleasure of walking in the city of Porto Alegre focused on the users who perform daily tasks, with the purpose of identifying experience elements that could be explored in Design-oriented projects. The Appraisal Theory structure was used for in-depth qualitative interviews and was applied on people that prefer commuting on foot. The theory indicates that emotions are resulted from user appraisal on a product or event associated with well-being. The results were combined into four concerns related to the pleasure of walking in the city: *discovery*, *practicality*, *aesthetic pleasure* and *belonging*. These concerns are related to the user's motivations to walk for their daily activities, and can be used to inspire new design projects in an urban context as a way to qualify public spaces and users experiences. The next step of this study is to develop a quantitative research in order to show the relevance and the probability of each of the four concerns.

Keywords: *user experience, Design Emotion, Appraisal Theory, urban space.*

1. Introduction

Big cities are made of complex problems that involve large-scale urban planning issues such as urban growth, the renewal of degraded areas, and public policy development. The complexity of said problems, though, involve smaller scale issues such as daily basis concerns. These concerns focus on the relationship between citizens and the city they live in and how it interferes with the neighborhoods' quality of life, the streets' vitality and safety and the usage of squares and parks. For [3] the socioeconomic vitality of big cities also embraces such dynamics. Therefore, perceiving a city's issues also means it is important to understand common and everyday practices regarding the relationships and interactions between users and the urban space.

In the city of Porto Alegre, the fragility of day-to-day activities become apparent when we notice that pedestrians no longer take part of the public spaces. Areas that were before reserved for pedestrians are now being destined to automobiles. A few factors such how easy and convenient it is to purchase vehicles - which people use for all kinds of activities - and lack of safety - connected to the fear of armed robbery - may contribute to the phenomena. Even so, it is possible to observe that a few people still commute on foot. Such practice, that remains active in a few areas of the city, triggers some questions: what instigates curiosity for walking? What generates pleasure in such activity?

Therefore, this paper focuses on understanding walking experiences in the city through elements that are part of the experience relationship between users and the urban space. Experience Design brings to light the emotional dimension of the experience, which does not rely only on the understanding of functional or physical elements. Instead, it addresses intangible elements that cohabit the interaction of users with the urban space. Accordingly, our paper's objective is to understand what are the components related to the *pleasure of walking* experience in Porto Alegre's urban space. For that to happen, [1] *Appraisal Theory* will be applied as a basis. The theory proposes emotion as the result of an evaluation done by the user regarding a product or event when regarding their well-being. Its purpose is to understand how a causality relation is established between evaluation and emotion, or how an evaluation triggers an emotion. Said theory may aid the Design field as it can provide design possibilities in order to avoid or optimize certain emotions [5]. At the end of this research, we intend to provide territorial design inputs for potentializing the pleasure of walking in the urban space. In the following chapter, we will briefly present the Appraisal Theory; followed by the methodology applied in our research. Afterwards, we will present the obtained results and finally our final considerations.

2. The Appraisal Theory: a brief review

User experience can be understood by the sum of three components: aesthetic experience, related to the feelings aroused during interactions; meaning experience, related to the meaning given to a specific products; and emotional experience, related to the emotions or feelings triggered [2]. According to the authors, an emotional experience results from the encounter between the user and a product or an event, which results in an evaluation capable of interpreting said event regarding the user's well-being. [1] suggest that it is necessary to understand and identify individual concerns or intentions in order to comprehend emotional responses that emerge from such interactions. This way, it is possible to assimilate the evaluations that stimulate the intended emotions.

Among the existing theories that approach the studies on emotions, the Appraisal Theory based on cognitive emotion theory is considered to be the most complete one in the Design field [5]. This theory proposes a model that aids identifying elements for the evaluation of a designated emotion and specifying such identified components for making them tangible in Design projects. These emotional responses are the user's unconscious and automatic appraisal related to his or her well-being. If the appraisal results in a positive response, a pleasant emotion is triggered in the user. If it is negative, it stimulates an unpleasant emotion.

For the understanding of such evaluation to be possible, we have decided on using the componential model presented by [1]. The model describes the evaluations from components that are related to particular aspects of a determined situation. As an example, when a user can evaluate a product or an event in relation to the confirmation or violation of his or her expectations, it is called *expectation confirmation*. The authors list six more relevant components that are evaluated in product experience: *motive consistence*, related to the efficiency of a product in relation to what is expected by the user; *pleasantness*, regarded as the sensory pleasure caused by a certain product or situation; *agency*, known as the acknowledgement of the agent responsible for the positive or negative emotion; *standard conformance*, related to the evaluation of a product when compared to another; *certainty*, that regards safety; and *Coping potential*, connected to the actual abilities people have to solve problems [5].

As emotion is caused by an evaluation regarding the user's interests towards a product, it is important to understand what such interests and concerns are. According to [2] *concerns* can be related as the user's intentions or goals related to the product. It is in the relation between concern and product that there is automatic evaluation regarding the user's well-being, which ends up triggering a specific emotion.

The figure below shows the three variables involved in said processes.

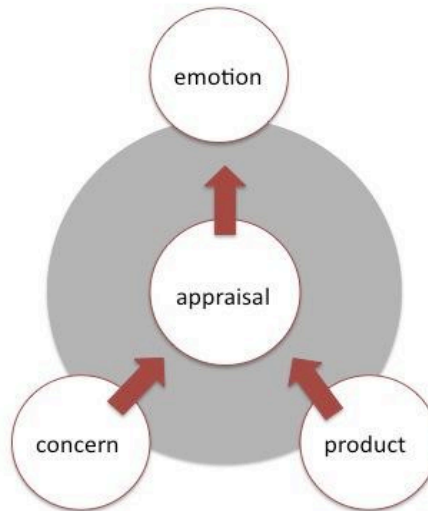


Figure 1. Basic model for the understanding of emotions when regarding products. From “Framework of product experience.” by Desmet, P., & Hekkert, P., 2007, International Journal of Design, 1, p. 62.

The model allows us to understand how emotion is triggered under certain conditions. It is possible to identify individual intentions related to the product and understand which evaluations trigger the intended emotions.

3. Methodology

With the objective of understanding the components related to the pleasure of walking in the urban space experience, an exploratory research was developed in order to better analyze the practices and motivations connected to said activity and its concerns. For that reason, we performed a qualitative study that helped us understand the phenomena in a subjective way [6]. The primary data collection regards in-depth interviews guided by a script based on [1] appraisal components.

We have chosen three neighborhoods as starting points for data collection. These areas represent mixed-use urban spaces – in other words, they are residential, industrial and offer services. By doing so, we are able to perceive different environment usage possibilities, including activities that can be done on foot. The interviewed subjects should also have the habit and the liking for walking. To determine the number of interviewees, we have decided on applying the saturation criterion, which happened after six interviews. The interviewed subjects had different profiles: men and woman from 31 to 40 years old whose occupations varied among teachers, advertisers, fashion producers, journalists and architects. The gathered data was handled through content analysis. In the next chapter, we will present the results of our research.

4. Results

By analyzing the in-depth interviews, we were able to identify four elements that influenced the experience of walking, addressed in this context as *concerns*. From the performed research, our objective was to understand which triggers influenced the pleasure of walking. The four encountered concerns and their components go as follows.

Discovery

This concern is connected to the possibility of association with the surroundings and paying attention to detail: unfenced yards, trees, new places, new people, new stories, etc. It is a way of exploring and getting to know the area, neighborhood or city. It is also associated to not wishing to drive a car, which, according to the subjects, would not acknowledge the same type of relationship with the place - the driver has got to watch the road, be aware of other cars, stay alert, worry about safety and parking issues. The pleasure of walking is directly connected to the wish of **merging with the urban space**. One of the interviewees, for instance, usually takes her mobile phone along with her on her walks. That way, she is able to register her discoveries through taking photographs. Each new perceived detail, every person that goes by or even an overheard conversation generate a feeling of owning that space.

Discovery is, therefore, associated with four components: *pleasantness*, *motive consistence*, *agency* and *standard conformance*. There are similarities among them, but each acts under a different light. The first two are somehow related to feelings of gratification, where the activity of walking triggers new smells, new stories, the feeling of having people around and, at the same time, it creates proximity and the feeling of belonging to that place. *Pleasantness* is linked to *sensorial pleasure* [5] produced by such experience. On the other hand, *motive consistence* – which corresponds to the evaluation of a product or experience according the motives for acquisition that may be instrumental or self-expressing [5] – is, in our study, related to the known advantages. *Agency* is the component that regards the perception of responsibility in a certain situation that, according to *Discovery*, resides in the user itself when he or she chooses to have a closer experience with the environment. *Standard conformance* is perceived through the experience of agreeing with a set of social rules, of belonging to an approved acknowledged practice.

Table 1. Examples of the data found in the *Discovery* concern.

Discovery Keywords: exploring, details, relationships, sensations
<i>“There isn’t a better way of getting to know a place than walking.”</i>
<i>“If you’re in the car, you don’t interact with the street. I love to walk feel the place because every five meters there’s a whole new place with new people, new sounds, you notice if there’s more or less vegetation.”</i>
<i>“I think it’s interesting to see the city, to feel what other people are feeling (...) when I drive, it’s from one garage to another.”</i>
<i>“(…) Because when you drive you don’t feel the place, it’s another kind relationship you have with the streets, with the city, with the place.”</i>
<i>“I have chosen this neighborhood because I wanted to explore the area. And I found a lot of cool stuff around here.”</i>

Practicality

Practicality is connected to the wish of running errands independently, without having to worry about traffic, parking, roads, etc. It can be associated to external issues, such as convenience or whether the neighborhood adopts the practice of walking. It can also be linked to internal matters, since there is a positive evolutionary feeling of being sustainable when choosing not to drive. The interviewees search for reasons to commute on foot and prefer to leave the house with a goal in mind: going to school, to the drycleaners, to work. Rain is not considered to be a restraint since umbrellas are a viable solution. Running errands on foot generates the pleasure of moving. This experience is also connected to the neighborhood's context and surroundings: where else can I go on foot? What other neighborhoods can I enjoy? The interviewees benefit from the centrality of their areas by extending their routes to neighboring regions.

This concern is connected to *motive consistence*, in which elements related to instrumental and self-expressing elements were perceived. It was noted that the subjects are satisfied and happy with the idea of running errands on foot and, by doing that, they end up noticing how convenient their neighborhood is. This concern is also connected to *standard conformance*, since there is a current worry about sustainable choices, which considers social and environmental impacts. The interviews have shown that one of the motivations for walking is the feeling of making a smart and evolved decision. It is also connected to *agency*, since the subjects have the feeling of control – that is, they can perform their activities in their own practical way.

Table 2. Examples of the data found in the *Practicality* concern.

Practicality Keywords: convenience, practicality, movement, evolution
<i>"I think it's more practical, you don't depend on anything, you don't need a parking spot, you don't have to worry about safely locking and unlocking the car. [I commute on foot] mostly because then I feel things differently."</i>
<i>"The convenience of being close to everything, in my case, of being near my workplace, I can go there on foot and also the fact that I can walk here, I can commute at all times. This is nice, it's nice to walk around here."</i>
<i>"I like walking when I have a goal, I found that out about me. After a while you find out that it is tiring to go to the park and walk around it ten times. So I started to find things [places] I could go on foot. It is nice to have a goal and walk to that place"</i>
<i>"Walking for me is not only for fun, it means going somewhere else (...) in the neighborhood. It links to other nice neighborhoods nearby."</i>
<i>"Because it's a place where things happen on the street. There are people walking on the streets at all times. There are places to go, it's close to a lot of bars, and there's a movie theater, a shopping mall, lots of things to do around here".</i>

Aesthetic pleasure

The pleasure of walking is related to the architecture and characteristics of the space: the types of street (paved or asphalted), how wide the sidewalk is, lighting, neatness, front view of the houses and the height of buildings. The subjects choose their courses according to said aspects as they consider walking on a not so visually polluted street, on not so uneven sidewalks, to be more pleasant. There is also wish of taking care of such spaces. This concern is also connected to positive interferences of the wind, the sun, the smells and sounds. This combination

of factors creates a feeling of lightness and happiness, linked to well-being and **pleasantness of the space** - making this concern connected to *pleasantness*. This behavior is also related to *standard conformance* as the subjects consider their neighborhoods to be superior to others. *Motive consistence* was also noticed, since all well-being linked to the activity of walking shows psychological (happiness and lightness) and physical (pleasantness) gains.

Table 3. Examples of the data found in the *Aesthetic pleasure* concern.

Aesthetic pleasure Keywords: pleasantness, beauty, sensations
<i>"Because I'm moving, I spend the day feeling better, there's wind blowing in my face, I get some sun, I see people. It's nicer, it helps me."</i>
<i>"I feel light, free, happy, healthy, sustainable."</i>
<i>"When I leave home [to walk] I go to Nilo Peçanha Avenue, in the Mont Serrat neighborhood, because it's more beautiful, there are beautiful people there, more trees and a nicer atmosphere."</i>
<i>"It's a beautiful area with lots of trees, from here until Cidade Baixa there are many tree-lined streets, lots of old houses, it's pretty cool. You get to see things, there are interesting things to see."</i>
<i>"I enjoy walking, but the place has got to be nice. If there were walled and fenced lands it wouldn't be nice. It's interesting to see variation and things happening along the way."</i>
<i>"In downtown Cherbourg (Normandy) there is a space for traffic, but the sidewalks are plain, inviting you to walk on them, they are beautiful and there's a beautiful view. You don't see so much visual pollution."</i>

Belonging

The *belonging* concern refers to the encounter among people, neighbors, local marketers and relatives, which generates the possibility of sharing and talking with interesting and similar people. The experience of walking is connected to the wish of belonging to a community, of being seen and recognized as a member of the area. As people decide to start walking, they are choosing to have a relationship with the other residents. Streets, stores and parks come alive as people benefit from them and they become a venue where people can gather. The pleasure of walking occurs for **social motivations** and by the **wish of belonging to a community**.

The concern is associated with *motive consistence*, *standard conformance* and *expectation confirmation*. The first one because of the importance of social expression in the experience of walking, which becomes more pleasurable when there is acknowledgement and some kind of relationship with the other residents. The second is guided by the wish of living a neighboring and community experience: the current trend is to value what is local (services and products) and socialize with the neighbors. The experience of walking meets these two aspects. *Expectation confirmation* is related to an evaluation of the experience according to the user's previous expectations. In our study, the subject expects social recognition when walking, which happens at the moment of contact and through visual (by spotting a smile, for instance) or verbal communication.

Table 4. Examples of the data found in the *Belonging* concern.

Belonging Keywords: encounters, community, sharing, neighborhood, belonging.
<i>"There is also the matter of relationships, because I usually know the people I encounter on the route I take. When I go for a walk with my son Samuel, he also stops to talk to people, some people at the stores."</i>

<i>"I would like a very residential place, it doesn't have to look like the countryside, but I'd like to have a neighbor, go for a walk and meet the neighbors."</i>
<i>"In my teenage years, I lived in condominium that contained about forty houses and what I would do most was chat with three friends while walking. We would spend two hours walking around the condominium."</i>
<i>"It's nice when I meet interesting people."</i>
<i>"I think that other neighborhoods don't host the same life as here. Of people walking, people standing on the streets, people sitting on the sidewalks."</i>

The Appraisal Theory helped us identify four concerns related to the experience of walking connected to *pleasure*: discovery, practicality, aesthetic pleasure and belonging. For understanding emotional responses resulting from the interaction between user and product, it was necessary to comprehend and identify individual worries or intentions to, afterwards, understand the evaluations that stimulate the intended emotion. Therefore, the four identified concerns show us which individual motivations stimulate the pleasure of walking.

The theory was essential for categorizing the concerns regarding the seven components. On the other hand, due to the function's overlap, we were able to notice the difficulty of finding only one that exclusively represented one of the concerns. For that reason, for *practicality*, *aesthetic pleasure* and *belonging* three components were adopted. For *discovery*, four components were used. The organizational table below better represents our findings.

Table 5. Demir *et al.*'s (2009) components applied to the *Pleasure of walking* concerns.

	Discovery	Practicability	Aesthetic pleasure	Belonging
Motive consistence	x	x	x	x
Pleasantness	x		x	
Standard conformance	x	x	x	x
Expectation confirmation				x
Certainty				
Agency	x	x		
Coping Potential				

A few factors came up during the process, such as feelings of vulnerability, the city's weather and having to carry bags, backpacks or other materials while walking. Vulnerability related to deserted streets at night and during weekends and summer time make people think twice before going for a walk. That way, they think of measures for protecting themselves, such as carrying waist bags in order not to take too credit cards and documents: *"The robberies make me think about getting a taxi, even if I go somewhere near, because I don't want to go to that place at that time"*.

Porto Alegre's heat during the summer can get in the way of pleasurable walking. Some of the interviewees avoid going for walks in certain hours or change their itinerary to more tree-lined streets while others change their way of commuting: *"It's not very pleasant to walk during the summer here because there aren't many trees, so it's usually very hot"*.

Having to carry things also influences the pleasure of walking as it requires extra physical effort: *“I go to the supermarket on foot whenever I can, when I have time to spare, but then I can’t buy too many things”*.

Besides that, the act of driving was mentioned by all of the interviewees as source of annoyance. Everything that involves cars – such heavy traffic, honking, fights and parking issues – encourages walking or searching for other commuting methods: *“I get angry on traffic because I think it’s annoying that more and more people are buying cars or getting new a new model every year. There’s pollution, honking, people getting stressed out just because they are driving”*.

All of the interviewees brought up that there are not enough bakeries in the neighborhood where they could go on foot. It is curious as we studied mixed-use neighborhoods and it lacks a very common and daily shop. We could say that bakeries inspires many different meanings to the residents: a certain nostalgia of buying fresh bread, the aroma that spreads throughout the street, a venue where neighbors meet and where is practical to quickly buy food on the way home. All of these meanings have a connection to the four identified concerns and show practical and applicable possibilities as stimuli for the pleasure of walking in the city.

Our research has also shown that from commuting on foot through such spaces, people create a sense of belonging to the place and, consequently, they wish to qualify their experience. There is a wish for taking care of the space, whether it is public or private, and raising awareness about how small solutions brought up by the users themselves would be helpful. The respondents seemed to be proactive when they acknowledged issues and came up with solutions while being the main agents of change – as, for instance, ideas for the maintenance of sidewalks, new services and retail offers, new public parks and paths, the decrease the odor of the sidewalks, etc. To improve this situation, for example, which is connected to Aesthetic Pleasure, a few respondents suggested that residents used a vinegar-based mixture to clean up the waste left by their own pets.

5. Final considerations

The main objective of this paper was to understand the components related to the experience of walking in the city from the mode proposed by the Appraisal Theory. Application of the method allowed us to comprehend the users’ evaluation on the experience of commuting on foot in the city regarding their well-being. The results of this research showed the following concerns: *discovery*, *practicality*, *aesthetic pleasure* and *belonging* as the main individual motivations of the interviewees. Such concerns stimulate pleasurable emotions while walking.

The identification of the components in such evaluations is a way to make them tangible for their application in design-driven projects. Therefore, the employment of the Appraisal Theory may aid projects that aim at qualifying territory.

Through such approach, design has the ability of noticing common and day-to-day issues and of approaching the connection between user experience and urban spaces. For that reason, designing for the pleasure of walking should consider the urban space itself (as a product) and what the users’ intentions are when hidden behind such emotions (discovery, aesthetic pleasure, practicality and belonging). This understanding creates new perspectives for developing projects towards territories, it allows interventions in the physical space and generates strategies for enriching local aspects (such as social, cultural and symbolic) in each neighborhood. By doing so, new project inputs or strategies focusing on qualified experiences are offered. For instance, we could suggest developing maps or *apps* that use those four concerns to show the advantages and disadvantages of a neighborhood for those who

want to run their errands on foot. Looking at the city and understanding such common daily practices is an essential way of promoting more humane and qualified urban surroundings. Interventions that pose as emotional triggers could also be proposed, such as the development of projects that aim at taking care of urban landscaping but focusing on the users' requirements. That includes taking care of the basic elements that shape the city in an unusual way, proposing common living areas in parks by setting benches next to each other to stimulate interaction, building bridges and footbridges with different leveling and offering the user new ways of experiencing daily life events, encouraging the culture of community gardens, which in turn promotes a sense of caring and belonging to the area. Finally, we propose a quest for solutions that enable users to interact with their surroundings by appreciating, creating new perspectives and unveiling new feelings for the city.

Accordingly, this research could benefit spheres other than just territorial. It can be used, for instance, to inspire citizens of an area or neighborhood to promote community gatherings and local investments. As the results of the research showed interest in qualifying the experience of walking in their areas, they can use the emotions found to inspire others to take care of neighboring spaces and promote events with people that share same interest. Initiatives such as neighborhood walking tours, festivals held on the streets and in parks, online platforms to reunite neighborhoods and urban gardens create new forms of social interactions between neighbors that can stimulate the use of local spaces on foot. Companies and brands can also use those emotions as a base for marketing strategies to connect with a certain community or neighborhood. Events can be created (such as store events, special offers for pedestrians, the use of the store space for neighborhood gatherings, etc) or investments to qualify the experience of walking in the area (signs, adoptions of parks or streets, etc).

By understanding emotions, Design can cooperate as it approaches issues and supplies inputs for developing projects or guidelines in a territorial scope through Emotional Design.

For further investigation, we suggest developing a more detailed research through quantitative data collection in order to understand how relevant each of the concerns is. We also suggest expanding this research to other contexts as to verify if the concerns and the components duplicate.

6. References

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