Ambiences and Safety? Methods for Security Experience Design

Ari Koivumäki

HAL Id: hal-03220343
https://hal.science/hal-03220343

Submitted on 17 May 2021

Ambiences and Safety?

Methods for Security Experience Design

Ari KOIVUMÄKI[1]

Abstract. TAMK is taking part to Smart Urban Security and Event Resilience Project (SURE) funded by the EU's Urban Innovative Actions initiative since 2019 and ending 2022. Our objective in SURE is to get data how the safety sense of ambiance affects to act and participate in ordinary social life? Due COVID-19 the method changed from go-along with the special groups to different places and occasions around the city center to virtual walks using 360-technologies, simulating and dramatizing the experience. The aim remains to develop and update the situation awareness of safety, for the improvement of urban planning and development of security by design concepts. In my paper, I will study the methods for safety experience design.

Keywords. Ambience, Security, Safety, Urban Planning, Service Design

Introduction

Safety issues in public spaces are common problem of modern societies. Public spaces have always represented the best picture of society and constant problem of mixed interests of its users. The task is to make space available to everyone (Keränen et al., 2013, 158-159). One of the objectives of SURE2 is "How to make the daily lives of citizens and urban environment safer by using innovative co-creation methods, to develop and test security in connection with actual urban development projects and public infrastructure in Tampere, Finland." In TAMK's work package, our original idea was to use go-along method (Kusenbach, 2003, 455–485; Keränen et al., 2013, 132) with the special groups, discussing, visiting and walking in different occasions and places around the city center. The aim was to share it with comments and analytical data to stakeholders for security.

There are various popular and busy event areas in the Tampere city center and events are important factor for the attractiveness of the city[3]. Safety and security are more and more important factors when competing for major events (Klauser, 2012, 1039-1052). Events will lead to lower safety and security level – how to handle the dilemma? How to maintain the high level of urban security in Tampere in connection with the rapid urban change and facilitate new kind of urban capabilities to predict the movement of crowds, secure usability of public space and facilities as well as effects of various urban security services and infrastructure, on the behavior of people in exceptional security situations?[4]

---

1. *Tampere University of Applied Sciences (TAMK), Finland,* ari.koivumaki@tuni.fi

2. *See at:* https://www.uia-initiative.eu/en/uia-cities/tampere *Accessed June 21, 2020.*

3. *Safe living in the Tampere region:* https://www.youtube.com/watch?v=SliK3nF2V3s

4. *See at:* https://businesstampere.com/tampere-gets-over-meur-3-of-eu-funding-for-improving-urban-and-event-security-2/ *Accessed June 21, 2020.*

Service Sesign as a Tool for Safety

TAMK's work package includes a structured participatory service design and co-creation process, which will be implemented in other work packages to produce event related incident simulations and exercises. In the SURE project, as a whole, we are developing safety concepts for two key locations: Tampere Central Square and Ratina Stadium, and later we will scale the concepts up citywide and apply to similar locations elsewhere in Europe.

Tampere University partners developed a structured discussion process methodology involving local authorities and interest groups for the urban security planning and implementation. The other work packages will also provide policy support, capacity building and guidelines for the City on the deployment and integration of latest digital and data driven solutions for the development of more secure urban environment. Simulations and exercises in other packages will use same use case scenarios and cover different types of potentially disastrous events.

Co-Creation Workshops for the Development of Urban Security Scenarios

In the first phase, our Tampere University partners developed baseline scenarios. The other participants of SURE project represent both local administration, other security/safety authorities, business and civic organizations. After co-creation workshops with project partners, we entered in three scenarios: constant safety, dynamic safety and exceptional security.

For the Tampere Central Square, constant safety describes the ambiance as if it was a living room for a citizen. Dynamic safety expresses the atmosphere felt during events, parades, rallies or during market days, and in Ratina Stadium when visiting a spectacle with tens of thousands other people and having special arrangements in traffic and passageways. Dynamic safety as a concept includes peace officers in case of disturbance and visible police force against rioters either in or outside the event, before or after it takes place.

Exceptional security describes the atmosphere when something unpredictable happens like a thunderstorm causing blackout and panic, which escalates. Terrorist attack is included in this scenario as well.

Methods for Security Experience Design

In the Nordic context in particular, safety highlights when something happens that affects the customer's sense of security. One of our methods was to research service concepts increasing the event security and event customers' feeling of security, to produce guidelines for smart and secure urban space.

In SURE we needed to concentrate on individual security experience and this is what service design does: represent the users' perspective. Within this methodological framework, we were able to focus on special features in customer journey related to safety and security services and integrate expertise from different disciplines. At its best service design is also interactive and ongoing (Moritz, 2005, 42-47).

Our research group organized workshops for security experience design to students and special customer groups. To begin with, we had to define the concept of safety and security with the people who participated the workshop. From Tampere City perspective the definition would be the following "Safe city allows its citizens to live in a healthy environment and have simple access to healthcare, to achieve readiness

and quick response to threatening or arising emergencies" (Lacinák & Ristvej, 2017, 522-527). From the perspective of a citizen, visitor or a tourist the feeling of safety is another, it is both social value and a human right as such, but it is impossible to create a secure place to anyone at every time. Usually, when something unpredictable and hard to understand happens, the consequence is to feel threats (Keränen et al., 2013, 130). I think the COVID-19 pandemic has once again proved it. Safety is something we trustworthy expect to happen as an everyday routine. In workshops, we started defining safety and recognizing problems related to security services and concepts.

Service Design Workshops

During discussion with a special group in 5th of May 2020, Satu Kylmälä and Tuija Ylä-Viteli from TAMK's research group made remarks from Central Square's safety during market events: the most important issue is peaceful environment, clear lighting, passageways with proper signs, secure meeting point to get together and means to get help if needed.

Crowded places are challenging in terms of security. City centers are often densely constructed, however easy to reach by traffic. A modern citizen needs to be able to communicate and stay within reach all the time via mobile networks. Otherwise, we are 'lost'.

Events are targeted to certain people, who nowadays might come from anywhere and not be familiar with the surroundings or the locals. Sometimes different habits just clash when people meet in strict circumstances, not to mention special groups, age or ethnicity issues. The feel of being equal with the others and treated accordingly, is the key.

Proper lighting is important for orientating inside the event area in safe – and needed to avoid pick pocketing. The nightfall albeit cozy, has its neglects. The signs and info highlighted with bright colors, otherwise e.g. several entrance points create a mess as does a sign without a clear indication of direction.

Tampere Central Square is a well-known place for locals, especially the fountain in front of the City Hall. The meeting point need to be there to find your friends among the crowd. As important is to get there and back in safe. The special group who participated the workshop 5th of May 2020 asked for exclusive exit route as well as safe passageways to pass the events they want to avoid. Moving from one place to another is also challenging especially for the elderly people.

Simulating Safe and Unsafe Places

To get further info from everyday safety in Central Square, Antti Perälä planned a 360 simulation. Our original plan was to make go-along walks, but due to Covid crisis, we could not. We needed to define the visiting routines, paths, customer experience, motifs and meaning making during the service journey in order to create customer profiles, design drivers and better service concepts related to safety and security. Perälä put up the simulation and a questionnaire to address https://surewp4.fi/. It is in Finnish with the following instructions:

- ▪ Safe and unsafe places;
- ▪ Mark the places where you like to visit and feel safe with 1-3 green balls and with red, the places you want to avoid;
- ▪ Drag the balls accordingly to the map.

After pressing "Valmis" (Ready), the program creates a 360-panorama view seen from one of the spots and a question to describe which things would add your feeling of safety.

The questionnaire has been open for two weeks in the end of May 2020 and we have got around 70 responds. The results will be analyzed in the autumn. Some themes of safety came up already on the first glance: clear visibility is important. You need to know where you are in order to know where to go. Another theme is safety related to traffic: how pedestrian, bicyclist or scooter fit to narrow sidewalk. The main concern for safety is people behaving unpredictable from either drugs or alcohol near and inside the Central Square park area, especially during nightfall.

Dramatizing Exceptional Events

What we are still missing, is to simulate the security for exceptional accidents. Carita Forsgren created another simulation of the Central Square to a different platform5. Now we are able to attach photos and video footage from different happenings, riots and events to the same 3D site. With this method, we hope to trigger eye witnessing and detailed memories. The basic scenery is calm and empty, photographed during Covid pandemic on May, so the contrast is remarkable to the events that has been there. I made the binaural recordings to accompany the 360 sights.

In the same platform, there are pictures and short animations by Ere Kreula and Anna Laukkanen. They are dramatized acts describing situations like "leaving friends and left alone" or "going home in the evening" and used for discussion during workshops.

Finally, Carita Forsgren wrote, directed and performed a Ratina Monologue, fictional 360 short film about a young woman looking for help to find a way from Central Square to Ratina Stadium6. The virtual tour unfolds the theme of being alone in a strange city. With the 360 view, it is possible to see the urban environment through the main characters eyes, immersed in binaural soundscape. The idea with this is to get people identify emotionally to the same situation and share the experience when answering the questionnaire attached. We have delivered the film in YouTube and Facebook and we will analyze the results in autumn 2020. It would be interesting to see how different data we will get from this virtual street tour questionnaire compared to the aforementioned ones.

Go-Along Safety Walks

In autumn if Covid pandemic allows, we are planning to put go-along walks into practice. After analyzing the results from the workshops and questionnaires, we can recognize places, routes and situations, which create unsecure feelings. Going along in real places and situations, making notes "on the fly" when something actually happens; the data will be different and detailed.

I hope go-along routes will activate thoughts, minds and make a change in mindsets for the familiar environment, to see it in another way, and to understand the value of the meaning making made in the lived, mundane environment.

---

5. *See at*: https://digicampus.fi/my/ *Choose "SURE-hanke WP4: kokemuksia.." Accessed 29.6.2020.*

6. *See at*: https://www.youtube.com/watch?v=czBGeWXVj4Y *Accessed 30.6.2020.*

Conclusions

The first results from our online experiment indicate that clear visibility, as well as safety related to traffic, are important for the feeling of security. The main concern for safety is people behaving unpredictably, due to either drugs or alcohol, especially during the night. It is obvious that our research will require more time to create proper concepts on how to make urban environments feel safer in general. Maybe the mission is impossible and we have to accept that when many people come together, the risk of insecurity accumulates. The risk is where the people are. With our senses, we use to control each other's behavior and react accordingly, sometimes with fear. Therefore, it is not always about the wrong place, event or time to get into trouble. It is the other people, whom we cannot avoid in densely populated community. On the other hand, desolate places, streets and alleys are fearsome for many of us, while there is no one to ask help and the social control is missing.

In the autumn, if the Covid pandemic allows, we are planning to put go-along walks into practice. After analyzing the results from the workshops and questionnaires, we can recognize places, routes, and situations, which create unsecure feelings. The results of going along in real places and situations, making notes "on the fly" when something actually happens, leads to the data being different and more detailed. I hope go-along routes will activate thoughts and minds, and make a change in the mindsets for the familiar environment. We need to see it in another way, and to understand the value of the meaning making in the lived, mundane environment. The ambiance experienced is an everyday experience for the city dwellers, which puts us in immediate contact with a situation in its entirety, and consequently involves an ecological approach to perception. The listening subject synchronizes to be part of the lived milieu (Thibaud, 2002, 2011, 43-53).

Hearing is one sense to control our surroundings. In nature, sonic events are ephemeral and follow stochastically each other. Hearing embodies when controlling the acoustic environment (of embodied cognition see e.g. Wilson & Foglia, 2017). Yet we are not actively listening at all times, quite often absent-minded, heading to somewhere with hasty. Traffic noise, distractive sound sources, bad hearing, health condition, age, the quality of terrain to name just a few gives more obstacles sensing the place and its sonic atmosphere.

The perceptions we sense are from our environment and we comprehend them in context. The meaning making depends from the situation where we stand and what we are going to do. While we are social beings, the interaction with the others is always there. The same goes with the experiences and memories we have. As Ingold wrote: "Whereas sensations are private and individual, representations are public and social" (Ingold, 2000, 158).

Keränen with her research group has noticed that in relation to security, citizen act based on their feelings than to reality as it is around them. Getting along in a neighborhood depends from everyone's own experiences: in familiar environment, the ambiance is different compared to strange one. While ordinary life is full of routines, you are not aware to foresee risks. This is why it is important to analyze which kind of phenomena are unsafe for real and which kind of events might be felt unsecure, but in fact belong to normal urban life, e.g. youngsters gathering up on weekends. Sometimes it is too easy to project racial prejudices on people or stigmatize for drug abusers and call that a threat. The visible presence of police forces or guards does increase the feeling of safety but not for everyone (Keränen et al., 2013, 134-188). Opening up late night libraries with different kinds of activities for teenagers near

shopping malls and the visible use of youth workers to prevent the distraction might be better, these are just examples of service concepts we are aiming to create within SURE-project. The other means to adjust the results thus far are to ensure passageways are equipped with proper signs, and to secure meeting points for getting together and means to get help, if needed.

Acknowledgements

References

Ingold, Tim. *The Perception of the Environment*. London: Routledge, 2000.

Keränen, Jaana., Vaattovaara, Mari., Kortteinen, Matti., Ratvio, Rami., Koski, Hannu &

Rantala, Tuija (eds.). *Turvalliset kaupunkiympäristöt. Rakenteelliset taustat, asukkaiden kokemukset ja arjen turvallisuusratkaisut.*

Espoo: VTT Technical Research Centre of Finland, VTT Technology 88, 2013. https://www.vttresearch.com/sites/default/files/pdf/technology/2013/T88.pdf

Klauser, F.R. "Interpretative flexibility of the event-city: Security, branding and urban entrepreneurialism at the European football championships 2008."

International Journal of Urban and Regional Research 36, issue 5, (2012): 1039-1052. https://core.ac.uk/reader/20660430

Kusenbach, M. (2003). Street phenomenology: The go-along as ethnographic research tool. *Ethnography* 4(3), (2003): 455–485.

Lacinák, M. & Ristvej, J. "Smart city, safety and security." *Procedia Engineering* 192 (2017): 522-527. https://doi.org/10.1016/j.proeng.2017.06.090

Moritz, S. Service Design: Practical access to an evolving field. London (2005): 42-47. https://web.archive.org/web/20120816041535/http://stefan-moritz.com/_files/Practical%20Access%20to%20Service%20Design.pdf

Thibaud, Jean-Paul. From situated perception to urban ambiences. First inter-national Workshop on Architectural and Urban Ambient Environment, February 6-8 2002, Nantes: Cerma, Ecole d'architecture.

Thibaud, Jean-Paul. The three dynamics of urban ambiances. In *Sites of Sound: Of Architecture and the Ear* Vol. 2. Brandon LaBelle & Claudia Martinho (eds.) Errant Bodies Press, Berlin, 2011: 43-53.

Wilson, Robert A. and Foglia, Lucia. "Embodied Cognition," edited by Edward N. Zalta, The Stanford Encyclopedia of Philosophy, 2017. Accessed 04 Jun 2020. https://plato.stanford.edu/archives/spr2017/entries/embodied cognition/