Exploring the experience in everyday pedestrian routes: watch for 'routinised' pedestrians

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1. Introduction

In order to reach their daily destinations many people walk along the same pedestrian paths. Perhaps, at first, they gave this daily 'journey' their whole attention, but after a while they don't actively notice it unless something out of the ordinary interrupts it (Wrights and Sites, 1997). With time this everyday path can become over-familiar, an almost invisible part of the routine, where individuals walk around isolated in their own thoughts, trying to separate themselves from surrounding noises and visual information. Many people make use of these 'in between' moments of isolation for daydreaming, whereas others try to find ways of making them less 'boring'. What causes these changes in people's behaviour towards their surroundings? From studies of Environmental Psychology it is a proven fact that the environment, and therefore environmental stimulation, has an essential impact on people's psychology (De Young, R. 1999).

1.1. Context definition

The environment that this project focused on is found in the urban pedestrian paths, along which people move daily as well as the spaces comprised by these daily routes. These were defined as the pedestrians' *passing environments*. Many people enjoy walking as a leisure activity. A solitary walk to think, or in pairs to talk, can be very relaxing. Furthermore, there are times when people have no other option, other than walking, in order to arrive on time to their daily destinations. In all cases they are considered to be pedestrians. However, this project did not deal with the entire crowd of pedestrians, but rather a specific group of pedestrians for whom, walking daily from an origin point (ex, house) to a destination point (ex, work), has already become a part of their routine. Throughout this paper, these people will be referred as r*outinised pedestrians*.

1.2. Project's goal

The project's goal was to design an interaction in order to enhance the *routinised pedestrians'* experience in their daily *passing environments* as well as to research this interaction's effects by means of experiential prototypes.

1.3. Approach

In order to reach the goal a 'research through and for design' method was followed. Accordingly, this project consisted of both research and design, carried out so as to constantly support each other. The research was conducted by 2) initially the literature and then 2) through a number of *routinised pedestrians'* experiences. Using the information obtained from the research, many ideas were generated, concepts were created and a final design was further developed into a set of experiential prototypes. Finally, using these prototypes, a user experience testing was conducted. In *research through and for design* experiential prototypes play a major role. They can be close to product (experiences), and can play the role of stimuli in formal experiments (Stappers, n.d.). In this way the intended interaction and the experience with the designed artefact can be tested using the prototype in a close-to-reality way: 'In view of the method's objectives, design research must have an eye for the full experience of the user. This experience not only covers the often studied perceptual-motor and cognitive skills of the user, but also emotional reactions'. Thus, exploring the *routinised pedestrians'* experience within their everyday *passing environments* implied the exploration of all parameters on which this experience depended.

2. User experience research (exploring the experience)

In order to identify the unspoken needs of *routinised pedestrians*, their full experience was explored. For that, user experience research followed the literature research through which the participants reported information about their contextual experiences. The research was conducted by means of informal interviews and video documentaries of the participants' casual routes.

2.1. Method

Twelve *routinized pedestrians* participated in the research, six women and six men. The participants' experience along their daily routes was researched. These routes

were located in seven different cities around the world: Delft, Rotterdam, Barcelona, London, Athens, Shanghai and Mulhouse.

The user experience research was divided in two parts. First, the participants got acquainted with the project through open interviews and were asked to draw a quick sketch of their everyday route (mental map). In the second part of the research the participants were given a camera and were asked to make a documentary of their everyday route with the only condition being to think out loud. The video documentaries were an attempt to reveal the everyday perception of the pedestrians and to catch the fleeting perceptions along a path.

2.2. Conclusions

As expected, the way that the environment was experienced by the participants depended on a range of parameters such as different individual personalities and physical characteristics of the route (fixed parameters), as well as others such as weather conditions, distractions and the pedestrians' general state (variables). The relevant parameters were combined based on their underlying nature in the following nine general issues: alternative paths, unexpected events, environmental stimulation, isolation' physical obstacles, pedestrian's state, visibility, mobility and social interactions.

From a closer study of the results, it appeared that the above issues affect the *routinised pedestrians' experience* in three distinct ways concerning the pedestrians': routine alterations, spatiotemporal perception and direction of their attention.

3. Identifying the unspoken needs

At this point it was time to set the guidelines in order to reach the project's goal; to enhance people's experience in their everyday passing environments. How could this enhancement be achieved? Based on the conclusions of the user experience research and the background information from the literature research, three possible directions were identified in order to enhance the walking experience of *routinised pedestrians*:

> Breaking the pedestrians' routine.
> Encouraging awareness of the surroundings.

Supporting thinking and reflection.

4. Reconstructing the experience

What the user experience research did, was basically break apart experiences of individual *routinised pedestrians* in order to analyse and understand them and eventually identify the issues that affected these experiences. At this stage there was a need to re-contextualise the sensible into design hypotheses. It had to be decided whether one main motive or hypothesis would be followed or if 'ideal' routes would be re-composed and serve as the basis for design. In order to proceed with the creativity part, possible experiences were reconstructed by putting everything back together through the use of personas and scenarios.

Using the three directions which were formulated, three potential members of the *routinised pedestrians* group, Sara, Scott and Melissa, were represented in the form of personas. Combining these personas with the research results helped to compose three experience scenarios.

5. Reflip (enhancing the experience)

Three sets of requirements and interaction guidelines were formulated next, using as starting points, the outcomes from both the research and the creative session. Keeping in mind the above, many ideas were generated aiming to enhance the experiences illustrated by the three scenarios.

The final concept generated after the evaluation of the three previous concepts was *Reflip.* The concept of Reflip involves a series of similar artefacts installed along pedestrian routes. Reflip follows mechanical 'routes', inspired by the first home movie machines. Three experiential prototypes were constructed and installed in different locations.

6. User experience testing

In order to evaluate the concept on an experiential basis, a second user experience research was set up and performed. The effects of the intended interaction, and consequently the enhanced experience, were tested in a close-to-reality way using the experiential prototypes. The developed artefacts were placed in different

locations of common pedestrian paths and were tested for four days with several *routinised pedestrians*.

Different research methods were used in order to: 1) obtain 'rich' information about the effect of ReFlip on the entire contextual experience and 2) obtain numerous records for a more objective evaluation of the experience considering the interaction with *Reflip*.

6.1. Method

The prototypes were installed in different locations and were tested for four days. The user experience testing was performed on two levels: First the qualitative method 'commented walk' was used in order to study the effect along the entire route. This was done on an individual level, with a single participant each time. The testing depended on the participants' unforced reactions and comments. The commented walks were followed by on-site observations and short interviews with a wider audience in order to get more information about the way that the installations were perceived and experienced.

On the commented walks were two of the pedestrians who also participated on the user experience research. During the quantitative observational method that followed approximately fifty people experienced the prototype.

6.2. Conclusions

Based on the evaluation, it was concluded that the experience of *routinised pedestrians* with *Reflip* can enhance the overall experience in their everyday passing environments. Interacting with Reflip breaks the routine within these settings. Reflip does not disturb the passers-by who choose not to participate in the interaction. Instead, it allows them to benefit from other people's interaction. Whether interacting with it or not, Reflip catches the attention of all passers-by. Heightening the pedestrians' attention voluntarily enriches their experience and at the same time promotes thinking and awareness of the surrounding environment.

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