## **Athletes and Street Acrobats:**

# Designing for play as a Community Value in Parkour

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#### **ABSTRACT**

Participatory design methods face challenges when designing for a widespread youth community. In such projects, it is not enough to design in collaboration with a few selected individuals; one must also strive to understand the community at a deeper level and incorporate its values and practices into the design solution.

We report on our process of designing with, and for, an identified youth group: the Parkour and Freerunning community. We show how the successful design relied not only on employing methods of participatory observation and participatory design, but also on acquiring an understanding of the practice as a 'fun community', valuing play over achievement and competition.

## **Author Keywords**

Parkour; Freerunning; Youth Culture; Design; Mobile service; Location-based service; fun; sports; community

## **ACM Classification Keywords**

H.5.m [Information Systems]: Information Interfaces and Presentation – Miscellaneous;

## **General Terms**

Design, Human Factors

## INTRODUCTION

It is not entirely straightforward to transfer the practices of participatory design to designing for an established but widespread youth community. If the aim is to address the community as a whole, it doesn't suffice to design together with representatives from the community; one must also understand the values shared within the community, so that the design will be acceptable to others than the local representatives participating in the project. Finally, gaining access to a youth community is often an issue; its members must be willing to adopt and appropriate a proposed design.

In this paper, we describe our experiences with applying participatory design methodologies to a community service

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*CHI'12*, May 5–10, 2012, Austin, Texas, USA. Copyright 2012 ACM 978-1-4503-1015-4/12/05...\$10.00. for the Parkour community, a recent and self-organized youth community that has, after first emerging in France, gone global.

We recount how working with expert Parkour runners created both a path into the community, but also friction related to some of the design intentions. In order to understand and address the issues, we needed to take a step back from our participatory design methods, to also incorporate a cultural and sociological understanding of the community. We analysed the problem as arising from the risk of turning a play practice into a sport, and the crucial importance of solving it as related to the way Parkour enables its practitioners to express an alternative form of masculinity. Through participatory studies of the community activities, participatory design, and our deeper understanding of the sociological structure at stake, we were able to redesign the service to be more readily accepted by the community.

## AN INTRODUCTION TO PARKOUR AND FREERUNNING

Parkour is a type of sportive leisure activity, which takes place in urban space. Those who do Parkour will climb on walls, jump over rails and buildings, defying the normal roads and paths offered by the given architecture.

Parkour has received some academic attention. The most widely adopted definition of Parkour is that it is the art of moving through almost any environment as quickly and efficiently as possible [11]. Bavinton sees Parkour as a method of navigation in urban space [1], in which a key concept is the reinterpretation of potentially dangerous objects in the path, as being not obstacles but support for continuing and amplifying the runner's motion. Another core element is efficiency [4]. Practitioners move as fast as they can, while at the same time use as little energy as possible. The efficiency concept also includes avoiding injuries as much as possible.

Active participants, *traceurs*, distinguish between two forms of the activity: Parkour and Freerunning. Where Parkour is more focused on the fluency and efficiency of moves, Freerunning turns the city-space as a training ground for acrobatics. Very often, the moves have a high aesthetic value but no functional purposes. Freerunners tend to stay in one area (such as a city square) for a longer period, to explore its possibilities and affordances.

In Sweden, the sport is becoming increasingly organized. It is now possible to find organized training clubs as well as partake in competitions and performances. The community is divided in its appreciation of such phenomena.

#### **Studies of Parkour**

Just as skateboarding, Parkour first emerged as a grassroots movement. Daskalaki et al. [6] suggests that Parkour originally was a political transgressive activity, aimed at the inhuman architecture of the Parisian suburbs where the sport was invented:

"The infamous Parisian suburbs, where *parkour* was invented, are among the most alienating and dehumanising urban clusters in the world." ... "It is easy to see *parkour* as a direct response to these spaces, an attempt to 'trick' them, through unconventional use, into yielding creative possibilities and a sense of one's own body and humanity."

An alternative interpretation is that it is more of an escapist than a transgressive movement. Several authors place the primary experience of Parkour as modifying the participants' perception of space, as it takes on new meaning in the context of the sport. Brown [2] notices that urban space is normally defined by the purposes that it is supposed to serve. By finding new uses and new ways of perceiving the urban objects, traceurs redefine the objectives of the shared urban space and eventually develop a different 'eye' for the environment. Saville [16] calls this the 'spatially transformative powers' of Parkour:

"When the traceur attempts to master some movements through space, such mastery, as it occurs (or not) is always accompanied by an emotional refiguring of spatial possibilities. In this sense, parkour speaks quite forcefully to an enchanted notion of place which, through wonderment, imagination and participation, is in continuous composition."

This reading of Parkour is inspired by the situationist movement [7], their concept of 'derivé', an unplanned journey through the city that changes our perception of it. Saville also congenially identifies the emotion of *fear* as a main challenge and driver in Parkour. This relates to Klausen's analysis of Parkour as a way to 'constantly challenge borders and do what nobody thought possible' [13].

Parkour has spread rapidly, is often referred to in popular culture<sup>1</sup> and now attracts new participants around the globe. Hence, the culture surrounding the activity is also changing. Today, the Parkour community is in many ways similar to that of Skateboarding as described by Karsten and Pel [12].

Both cultures maintain a collaborative ideal in which it is the individual's progression that is important. Players will often gather spontaneously (or on very short notice) to train together, and will congratulate each other on succeeding with a new move rather than engage in informal competitions. Although some individuals are known as 'gurus' within the community, there is no formal ranking system and a general resistance to hierarchies exists. For now the majority of the traceurs are male youth; in Sweden they also seem to primarily belong to the middle-class and be of Swedish origin. These traits are shared with the skateboarding community.

The sport is becoming increasingly organized. In Sweden, it is now possible to find organized training clubs as well as partake in competitions and performances.

## Parkour as a medialised practice

Klausen goes further to classify Parkour as a body, city and media culture [13]. His analysis is grounded in the deeply integrated use of video in Parkour. Klausen recounts how traceurs often will repeatedly watch Internet videos, aiming to bodily incorporate a pattern of movement into their own repertoire, and conversely film and upload their own moves in the landscape. The practice might originally have emerged due to the rapid spread of the Parkour practice and a consequential lack of available tutors, but has today become such an integral part of the movement that Klausen speaks of the traceur body as at the same time physical and mediated. Traceurs will watch films to learn a move, as well as invent new moves as variants of other moves. Just as the film is an integral part of the sport, so is the camera: Klausen notices that when out training, it is common that somebody brings a camera to film moves. In such situation it is common for the group to sometimes pause, and gather around the camera screen to watch and discuss what has been captured. He also recounts how the use of video serves to unite traceurs at a distance, such as when a practitioner gathers video clips from a large number of traceurs around Denmark to create a joint video representing them all.

What is less well documented is the high level of mobile phone usage that the sport already features. Already during our early pre-study, it became clear that the practitioners are deeply dependent on mobile phones, also for organizing the activity. In the Swedish Parkour community, text messaging seems to be the most widely used communication means, a trait shared with Swedish youth culture in general.

## PARTICIPATY DESIGN METHODOLOGY IN TRAVEUR

The Traveur project was initiated in collaboration between the Helsingborg-based Parkour and Freerunning group Air-Wipp, our research team, and Street Media 7, a small company developing mobile phone technology. Air-Wipp is one of a very few professional Freerunning performance teams in Sweden.

<sup>&</sup>lt;sup>1</sup> Such as in the game 'Mirror's Edge', which depicts a female Traceur as its protagonist.

The project was organized as a fairly standard participatory design project [15], with the performance team filling a central role of stakeholders and informants. Their participation in design workshops and their feedback on prototype helped answer an array of questions and shape the goals of the project. As the application was intended for the wider Parkour community, much time went into explicit discussions of the values and practices of the community. In this sense, our project employed what Cockton [3] calls worth centered design.

The project went through four distinguishable phases. It was initiated by a design brainstorming workshop, in which a host of ideas for community functions, games, and playful technology uses were explored in collaboration within the full team (including all three parties). The second phase focused on 'technology probes', which were very simple one-function applications that Air-Wipp would use in their daily practice and evaluate for their usefulness. Next came the prototype phase, in which the preferred set of functionalities were implemented and tested in practice in two iterations. A semi-functional version was first evaluated by Air-Wipp together with their students in Helsingborg, and then a fully functional prototype was evaluated through a public test in Uppsala with traceurs participating also from both Stockholm Parkour Academy and Uppsala Parkour. It was during these tests that some problems with the design started to surface. This article focuses on the value conflicts uncovered in these tests, and the fourth phase of the project: the subsequent redesign and trial period.

## **BRAINSTORMING, DESIGN AND PROTOTYPING**

## Project context and requirements

The goal of our project – to create a mobile community for traceurs – was proposed by Air-Wipp. Creating such a community was also the prime motivation for Street Media 7 to participate, seeing great potential for similar services in other domains. During our subsequent engagement with other practitioners, we could also confirm the desire for such a service within the general Swedish Parkour community. Due to the mobile nature of Parkour training, the most important requirement for the project was to create a community service accessible on fairly ordinary mobile phones.

The performance group also voiced a strong desire for a second function; they wanted to promote the sport by advocating safe training methods. The Parkour practice has spread rapidly, and many traceurs train on their own without any guidance from more experienced practitioners. The video-based online culture induces a risk of newcomers getting hurt by training moves that are too hard, too early, or under unsafe conditions (as many of the online videos show Parkour moves carried out at great height). Incorrect training methods can also lead to strain injuries. Hence, the Freerunner team set the project's second requirement; a

training 'Academy' that would guide newcomers into an effective, healthy and safe way to train.

From the research groups' understanding of the Parkour community (gained through literatures studies as well as interviews primarily with the performance team), we identified three more ways we potentially could support the community.

The third proposed functionality stemmed from Klausen's observations on the use of video. The current medialisation of moves focuses on the body, whereas the environment where the move is performed plays a secondary role, and is reduced to its significant shapes, regardless of its actual location. Considering a gymnastics hall full of equipment functioning as obstacles can serve a similar purpose in a video, there exists an increasing amount of instructional videos filmed indoors rather than in the urban landscape. One of our objectives thus became to re-introduce awareness of urban space also in the medialisation of the practice. By using the map and GPS functions available on modern mobile phones, it would be possible to mark suitable spots for training and relate videos shot on location to those spots, creating a medialised correspondent of the Parkour 'eye' for the environment discussed by Brown [2] and Saville [16].

Our fourth proposal pertained to the ad-hoc structure and timing of the Parkour training sessions. We proposed a map-based 'meet-up' functionality, enabling traceurs who want to train together to seek out their friends by inviting them to share their current location in real time.

Finally, our fifth proposal was slightly more speculative. We proposed to explore the possibility of creating playful or gamelike activities around Parkour that also could involve outsiders. This, we saw as a potential means to increase the interaction between the traceurs and bystanders in the city, promoting the sport as well as potentially recruiting new practitioners.

During the brainstorming workshop, it became clear that Air-Wipp did not desire any gamelike aspects to be developed. There were two reasons for this: firstly the fear that the Parkour community would reject any design that had a competitive aspect (due to its strong emphasis on collaboration), and secondly that the incitement to interact with people in public, outside the Parkour community, was perceived as very low. Hence, we decided to focus our development on the first four objectives: creating a mobile community tool, support training, mediate Parkour as a spatial activity, and support the ad-hoc nature of urban training activities.

## Initial design of Traveur

The design grew gradually through a number of iterations with feedback from Air-Wipp and field-tests with their students. During the whole process we were careful to not only get their feedback on the functionalities and interfaces,



Figure 1. The community and map functions

but also to observe their use of phones in general, and in particular our application in their practice.

In this section, we first summarize the functions designed and implemented during this phase of the project, and then discuss how we envisioned these would be used.

The Traveur application was split into three parts: the community function, the map-based marking function (that also supported the meet-up function), and a training function.

The basic community function is shown in Figure 1 (left). It consisted of a list of all members, a page describing each individual member and a community chat function.

Figure 1 (right) shows the map function. This view allowed users to mark points of interest on the map; add comments to such spots, select moves that could be performed in that particular location, and finally upload videos showing how those moves were performed on location. The collection of skills at locations was intended to aid traceurs in 'reading' each location, searching for obstacles that facilitated moves. The video upload function allowed traceurs to invent and spread entirely new moves related to a location.

The map function also supported the meet-up functionality. If a user wanted to meet with a group of friends, he or she could select them from the list of members and send them a 'meet-up' message. The message was sent to each participating mobile phone, giving recipients the option to accept or reject the request. If the request was accepted, the participants were able to monitor each others' location on the map for limited amount of time. The function is similar to that described in Williamson et al. [17], but conceptually simpler, as the exact positions of the meeting participants were shown.

The training function was informally called the 'Academy'. It consisted of a set of acrobatic moves that the community members could train. Each move was described by a short



Figure 2. The Academy function

text, a video (filmed outdoors, to maintain the focus on urban space), and a level indicating its difficulty.

There were three levels implemented: the 'basic' level, that just consisted of a few basic moves and safety instructions, the 'intermediate' level which contained most of the singular moves, and an 'advanced' level which focused on more intricate combinations of moves. Each move was also assigned prerequisite moves, so that the system could keep track of the moves one should have mastered before trying it.

In order to generate a true 'academy', the system was designed to let some of the community members act as trainers. Students of the academy would send in videos of themselves performing a sequence of moves, and the trainers would judge whether the student had learned the moves sufficiently well to 'graduate', based on their video. Graduating meant the student would get access to a new set of moves to train.

Traveur was implemented as both a web service and an iPhone application. Basic community and chat functions were implemented in HTML making them accessible on a wide variety of platforms. However, as the web technologies could not support the meet-up and location functionalities, these were prototyped in a native iPhone client. To create a single point of access for iPhone users, web functions were embedded into the native client. This combination was made in order to satisfy the requirement for an accessible mobile community service, while simultaneously allowing us to experiment with more advanced functionalities.

#### **Usage Patterns**

Through observing the prototypes in use, we obtained good insights into how the Traveur service might be used in practice.

On one occasion, we observed a group of roughly ten individuals as they were training intensely. The whole

group entered into a state of engagement similar to that of "flow" [5] where the phones were not really used. These ended up lying around on the ground or put away. A person who was not quite as active would occasionally use the phone to do bookkeeping or shoot a video of others in the group.

These observations had a direct effect on our design solution. Since an individual would not be documenting her/himself while engaged in training, this demanded a multiple login feature, where one member could upload videos to document the progress of another. A second consequence was that we saw no need, or desire, for immediate video upload from the phones. We had initially envisioned a 'single-step' function, in which a video would be shot, reviewed, and uploaded on location. In practice, there were typically several videos shot of the same person in the same place. These would be reviewed (and potentially even edited) *after* the training session. Hence, we decided to separate the function of marking a location on the map and uploading a video, so that videos could be attached to any previously marked location.

Finally, we also envisioned a special harness to allow traceurs to strap the phones to their body, a solution that could have potentially allowed us to use the sensors in the iPhone to trace movements.

#### **NEW TRACEURS, NEW CONSIDERATIONS**

As previously discussed, the public tests with the first prototype had uncovered some vague but distinctly negative feedback. To dig deeper into the issue, we decided to involve a larger group of traceurs in a new feedback and redesign cycle. The first step was to carry out three in-depth interviews with traceurs, who were active in two different Parkour groups. None of them came from the original stakeholder team, Air-Wipp. These interviews consisted of, first, a discussion and rapid prototyping session pertaining to their wishes and needs for support from a mobile service, followed by a presentation of Traveur and a feedback discussion on its design. The interview sessions lasted between 45 and 60 minutes.

All quotes below have been translated from Swedish by the author.

## Rapid prototyping session

First, the participants were asked to draw or name at least three functionalities that they would like to have in a mobile application. Participants were encouraged to sketch an interface for such a service. All three subjects sketched, and verbally expressed, a wish for a map function. They unanimously identified the need of marking good training locations and some of them pointed out a need to communicate with other traceurs through a chat function, in order to arrange a training meeting. One subject sketched and described a library with videos of moves to serve as inspiration. His suggestion was to structure videos according to their role in training (warm up, training a

particular skill, and actual Parkour moves), but did not suggest any separation into difficulty levels.

## Feedback on the existing prototype

Following the "feature imagination" part of the interview, we demonstrated Traveur. This allowed the interviewees to compare their expectations for a mobile service with the implemented prototype. During this session, the app was shown and all functions were explained in detail. Here, we go through the reactions per function.

**Community.** The three interviewees were much less active in online communities than we anticipated. Rather, they associated community participation with sitting in front of the computer instead of actually practicing the discipline:

"Some while ago there was le-parkour Sweden. There was information there. But people started discussing, instead of going out and starting training, arguing about what Parkour is. It took a lot of time"

"people are stuck in an effort to show what they can... it becomes too much talk"

This does not necessarily mean that the mobile community function was undesirable. For example, subject B reacted positively towards the introduction of a mobile community. This, he hoped, would make it difficult to write a lot of 'useless text', and that the result would be a community site with increased quality of content.

**Training**. All three interviewees immediately reacted against the design of the Academy functionality. The respondents interpreted the grading of moves into three levels as introducing a hierarchy *between participants*, so that the members who have accomplished more complicated tasks also would have a higher status in the community. Even more important for the respondents was the fear that those who achieved less (or failed) would lose self-esteem. It was clear that the hierarchical level system of the training function was in conflict with the philosophy of Parkour as non-competitive, and particularly in conflict with the concept that an individual trains for her/his own development.

"The only thing I can think of is that people will think that they are not good enough if they do not reach a level. There is little competition and it does not work together with Parkour.

...one might think that if you do it you are great and if you do not, you are worthless. You need to do something so that you know that it is not so serious."

It also became clear that it would be very difficult to create a training structure that could be universally agreed upon. It was hard to set difficulty levels, since practitioners have varying predominant skills, such as balance over strength. As noted previously, one of the core features of Parkour is that anyone can invent or change a move. Hence, the merit that a traceur has in the community comes not only from his

or her capability to accomplish individual moves, but also from showing creativity and imagination. The respondents seemed to share a fear that the training function could become too normative:

"People have different ranks, but this concept is far from what Parkour is. You can train at different levels. One might be better at balance and one better at strength. Who can say which one is higher in the classification? You have to be distanced from having a ranking system. It doesn't match with what Parkour is."

Safety concerns were expressed by two of the interviewees, suggesting that people may attempt moves that they would not be ready for, only in order to move faster in the community hierarchy.

The videos supplied through the training function were still seen as a good source of inspiration, indicating new moves to train or new obstacles types to be aware of.

"Sometimes you don't focus enough and you don't know what to do next. Which is the next step? Where should I go? In [the city] there are not enough places to train. This is too difficult, this is too easy and I stay somewhere in-between."

However, in regard to serving as a source of inspiration, judging and graduation hindered users. The grading feature limited access to videos for moves that were judged as being too difficult. In practice, this meant that, most of the time, the traceur would only have access to videos with moves he or she had already tried.

Map and Meet. In contrast, the utility of the 'map' function was immediately obvious, as the traceurs recognized in it many essential features that they had already named to be useful for a Parkour application. All respondents confirmed that the number of spontaneous trainings is quite high, especially during summer, and believed that the map and meet-up functions would support such activities in a positive way.

#### **ANALYSIS**

Before going into our redesign, let's pause for a moment on the values that are at stake in this design project. What we have here is not primarily a clash between the goals of the professional Freerunners and the more 'normal' community members — both groups desire better support for training. The problem emerges due to a clash between values more deeply embedded into the design, and those generally upheld in the community. We can identify three layers to these values.

Firstly, we have the explicitly voiced concern regarding the design forcing an explicit hierarchy on the community. It is important to note that this interpretation was unintended: it was the *moves* that were graded as being beginner, intermediate and advanced level, and not the participants. Air-Wipp supported this design, fully aware of the general

dislike for hierarchical structures in the community. Still, the design was read as instilling a hierarchy over participants, as some moves were accessible only when you had mastered a sufficient amount of the moves at lower levels. Even more problematic was the fact that 'trainers', through watching and judging the videos, were in control of graduations. This built-in separation of the participants into groups of trainers and trainees was too large a step away from the equality ideal ingrained in the community.

In noting this, we have to be aware that this ideal is not unchallenged within the community. In practice, advanced traceurs are acknowledged by the community and held in high esteem. (We believe that without the presence of Sweden's top professionals in our project, we would not have gained access to the community at all!) But this valuation of hierarchies is implicit, and cannot be made explicit in a design, or the community will reject it.

The second layer we discuss is the valuation of the personal achievement and progression, rather than the precise performance of a particular move. Parkour is *not* a sport, and our community members resisted making it into a sport. The valuation of creative innovation illustrates this. When a traceur comes up with a new move or invent a new execution of an existing move, it is appreciated as a creative and artistic intervention. This appreciation of change in Parkour is similarly shared with the *New Games* movement. Bernie DeKoven [8] writes in his blog 'deep fun' about 'fun' communities:

"In the sports community, the rules and officials decide if the players are good enough to play. If not, they change players." ...

"In the fun community, the players decide if the game is good enough to play, if not, they change rules. For them, the rules are always negotiable, the ultimate criteria for success being not so much who won, but much more, how much fun they were able to create for each other."

The Parkour community seems to be torn between these two ideals. It identifies itself mostly with the ideals of a 'fun' community, whereas at the same time the increased emphasis in the community on organised training, performing and even competing, causes parts of the community to drift more towards a 'sports' attitude. Our design of the training function promoted an increased standardization of moves. In this, the design implicitly brought the practice closer to becoming a sport. Giving participants the freedom to design their own graduation video was not sufficient, as the success of a graduation would be supervised by 'trainers', who presumably had been designing the training instructions and recording the training videos.

Why then, it is so important for the community to resist Parkour becoming more of a sport? A possible interpretation can be made from the fact that Parkour is a predominantly adolescent male practice. As with many masculine practices that gain widespread attention more and more women are beginning to practice Parkour, but still, they remain a minority. Hence, it is relevant to describe Parkour as masculine practice.

In analyzing skateboarding, Karsten and Pel [12] marks the sport as carving out a space for an alternative, and in some sense 'softer', form of masculinity. Some significant markers of this are the focus on personal improvement rather than competition, and also the soft, baggy style of clothing that gives the skateboarder a more feminine touch. Parkour shares the first of these traits, albeit the clothing style needs to be more streamlined due to the acrobatic style of the sport.

By contrast, appreciating and practicing sports is an important aspect of a normative masculinity [9]. Through its focus on non-competitiveness and creativity, the Parkour community manages to distance itself from the standard athlete stereotype, and by this, carve out an alternative masculine role that still incorporates physical proficiency. This observation is consistent with the way the practice has established itself primarily as a middle-class practice (in Sweden). Whereas the middle-class can risk experimenting with alternative role models, there is too much at stake for low status men. Compare this with how the athlete is established as one of a few, if not the only, way for lower class Afro-Americans to rise in society [9].

### **REDESIGN**

The redesign was the direct result of the feedback discussed above and our analysis thereof. Our interaction designer also actively trained with a Parkour team. This facilitated her access to them for the final extended trials, and allowed her to some extent 'go native', and partially internalize the values of the community.

As the map and community functions received positive comments, redesign efforts were focused on the training function. Here we were faced with a conflict: although the traceurs had rejected the Academy concept, its structure does reflect the expert knowledge of a professional group who also actively trained newcomers. Hence, we wanted to redesign the function to, at the same time, be more open, but also maintain some of the guidance the original system provided. Since access to videos, as inspirational resources, was considered to be beneficial, the redesign focused on leveraging this existing resource.

The very first decision was to take out the graduation requirement. This change had profound implications for the training system, which as a result could no longer can be seen as an Academy. The entire function thus changed character, to become more of a personal training guide.

Figure 3 shows the main screens of the re-designed training function. The screenshot at the left depicts an overview over the different types of core skills for training.



Figure 3. Main screenshots of the re-designed training function. Note in particular the 'Set your own training' option.



Figure 4: Screenshots of the re-designed training video interface.

After selecting one of the training categories, the user can browse through a list of videos as shown on the right. We also added the option "Set your own training", which allows the user to select the moves that they are interested in training.

Figure 4 shows how a move is shown to the Parkour runner. After selecting one of the videos from list, the user is prompted with the prerequisite moves for the selected move and a dialog with the options, "I have this", "Just watch, don't try" and "Don't watch, go back". If "Just watch, don't try" is selected, the video will be presented accompanied by

a button "You might like also this", leading to a list of related videos. If they select "I have this", indicating that they have the necessary skills to attempt the move, they will also get access to a "Description of technique" button, leading to a step-by-step guide for executing the move.

#### Feedback, second iteration

A Flash mockup of the redesigned training function was presented to a total of four practitioners from the same two Parkour groups as before. Again, the respondents were tasked with giving feedback to the design and suggesting improvements.

The redesigned functionality was considered by the subjects to be radically more in line with the Parkour mentality.

"It is good to easily go in, choose out two or three videos. It used to work to go on YouTube and look at "this is what I want to learn" and then go out and practice it. But now you have the phone and a bit more specific can choose things to train."

Being given a gallery of videos to browse through provided the traceurs with the possibility of creating their personal training program, according to their personal skills and interests.

Having a description for the technique utilized in each video was also perceived as positive.

"It can be good to be able to see this [description of the technique], when one is beginner, for example."

The warning text, stating the prerequisite skills required for a move, was also appreciated. In general, traceurs saw the videos as a source of information and inspiration. Giving open access to information and enforcing own risk evaluation was thought to be an advantage in the design.

"It's like this, one must try for oneself. Achieve by oneself. One must try. Even if one knows "I have bad balance". All should try so that one sort of gets better balance when trying new things."

Overall, the traceurs found the design very much inspired by what 'Parkour is', or what it is perceived to be.

"One should decide by himself if one can or can't accomplish a move. [...] It is really good and spreads a better message about Parkour."

## **USAGE PATTERNS – LONG-TERM USE**

The final, extended, user trial had as its goal to place Traveur in a real-life context. Four traceurs were equipped with the iPhone application during two and a half weeks. They had all been training Parkour for at least two years. (The advantage of recruiting experienced traceurs is that they train regularly on the streets, whereas newcomers tend to train more in gymnastics halls.) Three of them, two men and one woman, were aged between 15 and 17; the fourth

was a man of 24 years. Some of their training sessions were observed, and all four traceurs were subject to an elaborate interview after the test period.

The goal was to better understand how the Traveur prototype would correspond to actual training needs, and if using Traveur would in some way change their practice. We selected to focus entirely on the map function, leaving the training function for a later and more large-scale public test. The major reason for this was that the training function was being re-implemented at the time, but also because the training function was intended for less experienced traceurs.

**Community** This study again confirmed that the mobile community function was appreciated. In the limited context of the study the participants only had access to each other, but they expressed a strong wish to increase their number of contacts.

Map The map function provided several new opportunities for the participants. During the testing period, the traceurs set new spots on the map, added skills and commented on the additions of others. The videos that they did upload came from YouTube and were previously edited, confirming our expectations that video production is done separately from training.

The map marking feature received positive reactions from all subjects and was thought to have large potential for positively influencing trainings. One person reported finding new training locations that he was unaware of. The feature was considered to be especially useful when visiting a new city.

"I remember when we were in Malmö, X and I we would meet some of those who were training Parkour in Malmö. If we had Parkour spots as there are in Traveur, it would have been easier to find places to train. We used a website for Parkour spots. It was really complicated to find."

Before using Traveur, there was no other entirely reliable source of information on good training locations, information desired by most subjects.

"It was just to go around and look [for a good place to train Parkour]. If you want a new place that's just to go around and see what works well for one."

"Actually, it would be like this. If I'm on my way home from school and see a new place that I think it is good [for training Parkour], I would try to train there." ... "Then I would definitely train more. I would explore more as well. I would take more time for practicing new things."

As searching for new places is time-consuming, the sharing of knowledge about training spots was thought to have high potential for adding novelty and diversity to the current training habits. **Meet-up** The meet-up functionality was highly appreciated. The participants reported that they currently used multiple communication modes for arranging meetings, such as phoning, sending sms/texting, or the posting of messages to their Parkour group on Facebook. The meet-up function was thought to be among those capable of bringing the highest amount of change in training habits. In particular, it was seen to provide good support for spontaneous trainings, as it allows interaction in real time.

"Then [previously to using Traveur] you would just text or call someone, but now you can send a meet-up message."

Integrating the meet-up function with the mobile community function was also seen as promising, as it did not require them to know the phone numbers of all others in order to initiate a joint training session.

"It is easier to find someone else who is training [Parkour] if you have an iPhone with Traveur on."

"I would have just sent to everybody" [regarding meet-up messages]

Another advantage of the meet-up function over traditional technology used was noticed and explained by one of our subjects:

"What happens is that you can only turn on the mobile and leave it aside. You normally don't hear if someone is calling. But if you can just start Traveur, initiate a meet-up with everyone, then people can accept [the invitation for training] at their own pace."

The meet-up function also became incorporated into the training activity. During one participatory observation session, the traceurs used the meet-up function to invent a new training game. One of the group members would run away from the others, who were given the objective to catch him. The rest of the traceurs split into three groups, each with one person carrying one of the iPhones with Traveur. They gave a head start to the traceur being chased, and then started chasing. The group member having Traveur on the mobile would keep the iPhone in their hand most of the time, and in a couple of situations, when needing both hands, would quickly put it in a pocket.

From time to time, the chasing group would stop to look together at the map, in order to identify the position of the runner on the map. They would discuss how to best catch the runner with everyone contributing suggestions for shortcuts in the urban space in order for their team to be first. The area where the training was taking place was extended over a large area familiar to the Parkour group.

The invention of this game shows how much the Parkour community still identifies itself as a 'fun community' [8]

rather than a sport. One of our trial participants comments on this occasion indicating the same:

"Quite Parkour-inspired is to go away from the person that follows after. It was really fun when we tried it. It's fun to play with it."

The subject considered including this in the actual training as a new "thing".

## **DISCUSSION**

As discussed in the initial methods section, our design project was deeply rooted in participatory design. Through the close collaboration with a group of stakeholders from start, the identified problem with online video material, and the articulated purpose to contribute to a safe way of training Parkour, its original approach lies close to participatory action research [15]. It should also be noted that the community's general reluctance towards competition was brought up several times during the initial design phase and was used to rule out more game-like design suggestions. Hence, our design approach also explicitly discussed community values from start, as advocated by Cockton [3] and Le Dantec et al [14]. In this section, we wish to highlight what we believe were the main reasons why we still met with problems in applying such well-established methods, and point towards some keys to why we (eventually) succeeded.

## A dispersed and changing community

As emphasised by Ozanne and Saatcioglu [15], participatory design is typically done in close interaction with a local and identified community. The Parkour community is dispersed and heterogeneous. Hence, a major issue for the project related to grasping the values and practices of the community as a community. Here, ethnographic work on Parkour runners and similar communities was instrumental in shaping our understanding of the practice, as well as grasp why the valuation of play was so important for the traceurs. By engaging with several Parkour groups, we could also see that 'the theory matched the reality'. The local groups had a slightly different way of practicing Parkour than previous studies have shown, but still largely upheld the same values. Even Air-Wipp did, but due to its near-professional status they have compromised them further in their daily practice than our latter informants had.

## Designing for play as a community value

Although design for experience is a well established research subject [10], designing for play remains underexplored. It differs from designing for a game or a sport, in that the goals and rules of the activity are subordinate to the act of having fun together, and may change. Designing for play requires open design solutions. By introducing technology into an existing play activity, we run the risk of constraining it through rigid structures and instructions - as our initial design did through its fixed

training sequence and rigid instructions on how to perform moves. At the same time, technology can support a play community in inventing new forms of play - as our testers did by using the meet-up functionality for a chase game. We were particularly pleased to see that our original goal of designing a street game around Parkour was, in fact, realised. However, rather than us implementing it in code, it was created by the users, enabled by an open design.

## Designing for conflicting values

Within the Parkour community, the play value was contested by a tendency towards more sport-like characteristics. While our participants expressed a strong resistance to hierarchies, gradings, and competitions, the community still upheld informal hierarchies and desired structured training functions for beginners.

In our design, we needed to strike a balance between the requirement on openness, so as to support a variety of play practices, and the need for supporting safe training. Although this may not be desirable for an ethnographer, a designer can benefit by 'going native'. By training and socialising with traceurs, our interaction designer internalized the complexity of this value conflict, allowing her to find a design solution that struck a balance between the two requirements.

#### **CONCLUSIONS**

In designing for the (Swedish) Parkour community, we ran into issues related to employing user-participatory design, arising from the fact that our access route to the community was through a near-professional Parkour team. In order to understand and address the issues, we needed to take a step back from our participatory design methods, to also incorporate a cultural and sociological understanding of the community. The problems arose from an internal conflict within the community, that at the same time embodies values that mark it out as a 'community of fun', and the desire for more structure pushing the activity towards becoming more sport-like.

Our project illustrates the importance of simultaneously understanding a community 'from the outside' through ethnographic studies and social theory, and internalize its value system in all its conflicting complexity in design. Our final design is a compromise, made acceptable through its focus on openness and support for appropriation.

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