

# Friend or Fiend: Co-creation at Coolhaven-island

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## ABSTRACT

Often, technology is seen as a threat, e.g., privacy, identity theft, rather than a friend enhancing social inclusion. In the current project, students were enticed to design for social cohesion in Coolhaven, one of Rotterdam's neighborhoods well-known for social, economical, and cultural deprivation. Within the theme 'friend or fiend' students practiced co-creation techniques with local citizens to understand societal dynamics. After communicating these community insights with local government, concepts were developed that remove barriers between citizens by making use of geo-data; for this, subgroups that usually are not linked due to their diverse backgrounds or lifestyles were selected, e.g., elderly, students, or drifters. We report on the co-creation process as well as the resulting concepts of locative media.

## Categories and Subject Descriptors

H5.3 [Group and Organization interfaces]: Theory and models.

## General Terms

Design, Human Factors.

## Keywords

Co-creation, social inclusion, user involvement, mobile applications, locative media.

## 1. INTRODUCTION

Emerging communication technologies are deeply embedded in community practices; they allow for being connected all the time. Location-based applications and mobile social software might be appropriate in stimulating social cohesion. However, at the same time, one might argue that these technologies hamper social inclusion, as they enlarge the digital divide between people at ease with new technology and those who have no access.

## 1.1 From Big Brother to Big Sister

The paradigm of Orwell's Big Brother is based on the existence of a strongly hierarchical and controlling (national) structure, in which media is used to control and direct communities. Blinded by this paradigm we tend to neglect the fact that next generation media technology is driven by end-users, for whom technology is also a playful, personal, and friendly extension of its own self. In this paradigm shift from hierarchy to network there seems to be a lack of attention for the possibilities of viewing technology as 'friend' instead of 'fiend'. Database technology and geo-data tools have connected the real, ground bounded communities with the possibility of community building and endorsing from a geo-data and database point of view. At the same time, for young generations currently growing up media technology such as mobile phones and online social networks is everywhere; it is part of their life. What's more, their eyes are focused on the advantages of these emerging technologies. Moreover, ideas to dissolve human shortcomings, such as a chip implanted in the brain of paralyzed to communicate with the outside world, are no science fiction anymore [4]. The question might therefore not be whether Big Brother has become Big Sister, but what can she do for society. How can media technology enhance a community as a real group of people, living together in streets, with cars and children? Can we see Big Sister as a friend? Or do we still believe we need to treat her as a fiend? The current study aims to explore these questions by designing for social cohesion at Coolhaven Island.

## 1.2 Coolhaven-island

Coolhaven Island is a historic area in Rotterdam, characterized as socially deprived on one hand, but as the place to be for the 'creative class' on the other. The neighbourhood is plagued with societal problems, such as youth crime, home violence and drugs. The neighbourhood is economically deprived as well; one third of the 6,150 inhabitants are considered 'poor', with very low or no income, are unemployed, and are semi- or unskilled [2]. Deprived families and drifters share the streets with more than 3,500 scholars and students [9], while the creative class discovered the monuments, small streets, and old warehouses. The local and national government, not in the least because of the huge investments done in the adjacent new developed area, warmly encourage this inclination. Coolhaven, therefore, is seen as an upcoming neighbourhood; partly due to city council support, creative and educational class is growing and flourishing.

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### 1.3 Aim of Study

Being part of the creative class as well as providing education, the School of Media, Communication, and Information Technology aims to contribute to the societal problems mentioned above. More specific, the institute practices the human centered design principles she envisions by involving islanders in research and design projects that contribute to the local community as well. In the current project, students participating in the current media and creativity program were encouraged to demonstrate their co-creation skills in practice; their design task was to design for social cohesion, by developing a location based concept enabling meaningful connections between different groups, with different needs, desires, and media behaviour at Coolhaven-island. In the next section, we describe how this co-creation approach fits our curriculum, whereas the third section reports the results of the co-creation process. Finally, we reflect upon our co-creation curriculum and discuss whether it removed barriers between the identified subgroups living, working, or studying at Coolhaven.

## 2. CO-CREATION AS APPROACH

Within the two-year course on media and creativity, students are educated in creative thinking and creative problem solving in the first year, and in contextual research on paradigm shifts in the second year. In this curriculum co-creation is approached as a paradigm breaking involvement, with consequences for the design process as well as for political and economical changes in basic rules of decision-making and communication principles of value creating. Media and creativity courses combine contextual research on paradigm shifts and experiencing the practical consequences of the effects of these shifts on society, always in relation to the field of Communication, Media and Information Technology. Another objective of this curriculum, that started with the merge of three different faculties was to overcome the historical barrier between 3 different bachelor courses, for students aiming to graduate in media technology, media design, or digital communication.

### 2.1 Curriculum

Theory of co-creation contained popular theory on the change from a hierarchical society to a network society and the effects of this change to economics, decision models, politics, public administration, design practice as well as copy and intellectual rights. The theoretical part was provided during 5 lectures contained popular and visionary ideas on roles in the co-creation process [3], shifts in economic models [1,7,10], social communication models [7], the coordination of complex communication [8], and the ownership of co created ideas [5]. During 8 workshops students worked together on research and concept development. During the first two weeks mono-disciplinary teams studied the pro and cons deriving from their own disciplinary perspective. During the next 5 weeks they worked in multidisciplinary teams on concept development. The results of these co-creation practices (within the curriculum and with the local community) were shared through a condensed flyer and only one A1 whiteboard slide for communication with the client. Additionally, guests were invited to inspire the students; for example, the invited talk by Peters [6] gave interesting insights in his experiences in using geo-data for the organization of 750 emergency workers during an airplane crash. Last but not least the experience and rules of communication and ownership in co-

creation processes was reached by tutoring the ideas on creative commons.

### 2.2 Experiencing co-creation

Within the course co-creation was addressed at different levels. First level of co-creation was reached by working in multi-disciplinary teams. Students, usually working in different majors (e.g., media technology, media design and media strategy) worked together in different team combinations. At start, teams were clustered based on their expertise. These expertise teams conducted in-depth research within the own discipline, respectively on desired insights for media strategists, on geo-data and open source solutions, and exploring design solutions. After this first phase teams were regrouped in multidisciplinary teams for concept development. By choosing ‘cohesion through co-creation in the community’ as assignment they researched the different needs and wants of the community, different possibilities in using local geo-data and finding ways to let very different groups of people communicate with each other.

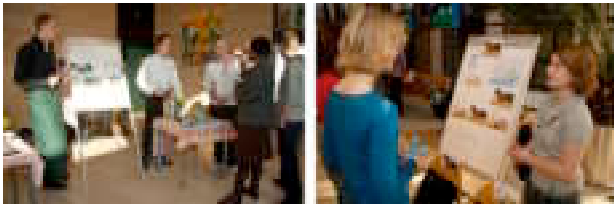
In this manner, co-creation experiences with the external world were included in the curriculum as well. On the one hand, by involving the islanders in the concept development phase. On the other by having an external client; in this case the department of housing and city development dS+V, which is responsible for initializing strategies and implementation of neighborhood activities.

### 2.3 Method

In total 171 students participated in the ‘fiend or friend’ project. More specific, 45 second-year students of the media technology majors, 115 media designers and 11 media strategy professionals were enticed to design for social cohesion. The students were divided in 7 classes, and all got the same instructions. Their assignment was to ‘co-create’ valuable local solutions for the Coolhaven Island community. Each class was provided with two subgroups of the islanders to connect. Selection of these subgroups, e.g., drifters, (creative) companies, families, young children, students, and the local government) was based on previous research, by students as well as by the client organization dS+V. The objectives of the latter for participation were, amongst experiencing the new field of co-creation, the distribution of innovative knowledge and getting examples as well as getting in touch with students for recruitment purposes. Moreover, this collaboration was seen as a learning opportunity for those employees, responsible for new media knowledge within the bureaucratic organization. As said before, each class started with in-depth research into their own specialization. Media technologists studied existing and emerging geo-data systems, with the emphasis on open source systems; design students researched workable co-creation techniques, while the media strategists researched communication principles and possibilities adding value for the specific focus group. Consequently, ideas were generated through – although it is a bit old fashioned method – interviews and desk research based on earlier research. People involved in this earlier research were available for questions and provided their research results.

All employees of the services department dS+V were invited on a so-called co-creation exhibition to discuss and collaborate in fine-tuning of the concepts presented (Figure 1). Besides they could express their appreciation for a certain project by marking it with a sticker. Each employee could give 5 points (5 stickers). In total,

over 200 employees ranked the several projects. The top 5 concepts were presented plenary. A panel of 4 judges representing both the client organization and the citizens decided which project of these 5 nominated was most remarkable and feasible at the same time. Although there was only one winner to be announced all teams profit from the feedback in finalizing their concepts for further development.



**Figure 1. Impressions of the co-creation exhibit (photos taken by Emiel Bakker).**

### 3. LOCATIVE MEDIA - CONCEPTS

Whereas the previous section described the co-creation approach, the current section illustrates the corresponding results. As sharing ideas is crucial in co-creation, each team had to design a flyer which should perspicuously ‘sell’ the concept. In total, 23 concepts were presented at the co-creation exhibition. Feedback gained in this session was included in the final concepts and in the corresponding creative common licence.

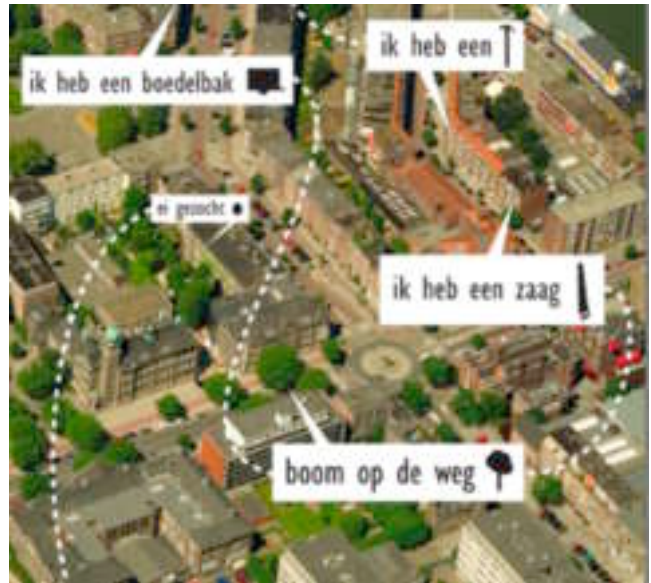
As explained in the previous section, 5 out of 23 projects received an encouraging award from the housing department dS+V. These promising concepts are currently under discussion for further development and implementation in the Coolhaven community. Below we briefly introduce three of the award winning concepts<sup>1</sup>.

*A drifter’s currency system.* Everybody grants a drifter a dime, but nobody wants to buy an alcoholic his fatal drink. To cover this opportunity students came up with ‘caring money’, i.e., rfid chipped coins that you can buy and give to the homeless and needing, who can exchange the coins for food and shelter. And, of course, in order to meet the locative element: these coins are traceable allowing the giver to trace and follow his gift. This concept was valued as most creative and original, not in the least for the low implementation costs (see Figure 2).



**Figure 2. Flyer of a drifter’s currency system.**

*Many Hands.* There is always somebody in need of the thing you just don’t need or of which you have lots. This concept can be a matchmaker in this market. A need mash up of cases used as examples, the idea about zilok.com, a map with goods, services and needs open to the community. Many hands make work light. The idea was seen as the best spot; unfortunately, were the discussions a bit biased through the use of semi forbidden video and audio (Figure 3).



**Figure 3. Flyer of the many hands make light work concept.**

*Co-opinion.* Why bound the process of citizen participation (enforced by law) to one place or a fixed moment if web 2.0 can solve the problem of people wanting to discuss issues, but cannot find time to be present at the council meeting when the relevant topic is discussed? This concept enables citizens to participate in local politics and to contribute to relevant discussions of the city council independent of time and location (Figure 4).



**Figure 4. Flyer illustrating the co-opinion concept: your opinion about Coolhaven island.**

<sup>1</sup> Flyers illustrating the 23 concepts can be downloaded at: [http://stud.gmt.hro.nl/0797648/coolhaveneiland/flyers\\_samengevoegd.pdf](http://stud.gmt.hro.nl/0797648/coolhaveneiland/flyers_samengevoegd.pdf)

#### 4. DISCUSSION AND CONCLUSIONS

The current work described our experiences with a new program on media and creativity, a course on co-creation techniques and their application in real-life practices, for next generation media designers, strategists and media engineers. Within the theme 'friend or fiend' students practiced co-creation techniques with local citizens to understand societal dynamics and with local government to motivate and fine-tune their ideas making them applicable for the local community. In the current study concepts were developed that remove barriers between citizens by making use of geo-data. It can be said that the Coolhaven experiment was successful; not only for the educational value of a co-creation approach, but also for the developed concepts of locative media. Students rated the course as interesting, relevant but slightly chaotic. Recommendations on planning and coordination will be included in next year program. Also the sharing part of the process will be improved. Easy sharing, discussing, and rating might enhance co-creation processes at all levels.

The Coolhaven co-creation experiment mashed up all aspects, which were meant to be discussed and experienced by the media and creativity course. By introducing the media illiterate department of housing and city development as a co-creative partner, the students experienced their responsibility of co-creation, while the participants of the housing department felt to be the laggards in terms of new media. With the local governments housing and lifestyle committee as sparring partner, the students were able to demonstrate their learned skill in the real-life practice. Theory became practice, and bridges were built between the creative class projects and the more formal approaches common for the bureaucratic and hierarchic way of communication with the housing department.

Currently, we are elaborating upon the nominated concepts. In next projects, prototypes will be developed and tested with the local community. Based on those results final applications will be piloted at Coolhaven, aiming to get answer whether these locative media ideas indeed contribute to social cohesion in the neighbourhood.

#### 5. ACKNOWLEDGMENTS

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