Prototyping for Participatory Democracy:
Fine Arts as Means for the Study of Multi-modal Communication in Public Decision Making

Karin Hansson
Department of Computer and Systems Sciences (DSV)
Stockholm University
Forum 100, SE-164 40 Kista, Sweden
+46-(0)70-737813
khansson@dsv.su.se

Love Ekenberg
love@dsv.su.se

Mats Danielsson
mad@dsv.su.se

Aron Larsson
aron@dsv.su.se

Johanna Gustafsson Fürst
johanna@gustafssonfurst.se

Thomas Liljenberg
thomas_liljenberg@bredband.net

ABSTRACT

We present a thematic art project in a suburb of Stockholm as a means to generate problem areas in focus for a research project on *multimodal communication and democratic decision-making*. Through art we play with different techniques and ideas about democracy in a particular location in order to obtain a better understanding of the citizens and their environments. Artists' actions, installations and mediations create a direct confrontation with the place and its inhabitants, and explore the dynamic relationships that constitute its context. The common denominator for the invited artists is that they work with situation-specific emancipatory art that in various ways relates to the physical and mediated public sphere. The art project *Performing Structure* is a collaborative process where the artists develop the project and take part in the contextualization in collaboration with researchers. This is achieved partly through a shared memory work on the theme of power / powerlessness. From this feminist research practice notions of democracy is examined in order to investigate, expose, enhance and / or remodel relations of the site. The aim with the art project is to put the site and the individual in a web of geographical, social and economic contexts. The aim is also to contribute to a debate on artistic research by showing how art can be viewed as a qualitative method. Through the practice of the memory work method we contribute to the development of this methodology, and map out a space for art in the field of science.

Keywords

E-government, Artistic Research, Interactive Media Art, Urban Art, Memory Work, Transdisciplinary Practice

1. BACKGROUND

Kista-Rinkeby is one of Stockholm's more expansive suburbs. Here local democracy meets great challenges in the form of global politics and a new kind of network economics. The location illustrates the new divisions created by globalization, where diverse socio-economic worlds are wrapped in each other [1]. Here, technology has not decreased but increased disparities, as the importance of social and cultural capital has increased in the networked economy, and the state's ability to balance differences has declined [2]. The inhabitants of the suburb are separated and united by the invisible but palpable borders. The area is home to over 45 000 people. Almost as many commute daily to the place to work. Rinkeby was created as part of the so called million program in the late 1960s, in which one million apartment were built in 10 years, and is today associated with a high degree of immigration, unemployment and low education. Located next to Rinkeby is Kista, being a result of the hope in the relatively new IT industry and is called "Sweden's Silicon Valley", but even here there are great social and economic problems [3]. The location is also home to the Department of Computer and Systems Science (DSV) at Stockholm University, where several research projects on IT and democracy are carried out. In some of these projects, the research aim to study how new multi-modal forms of communication can enhance democratic decision-making at different levels, ranging from local to international, and facilitate communication between citizens, stakeholders, and governments. The focus here is not so much on the transfer of information, but rather to strengthen the basis for democratic participation through the use of different types of social media and languages beyond the use of conventional texts and images.

Previous research on utilizing ICT support for public decision making, such as decision support systems and e-participation platforms, has mainly been focused on finding procedures for sharing and communication of decision data between citizens and governments, as well as on the incorporation of this decision data in decision making processes within, e.g., environmental management, urban planning, and policy analysis. Less work has been done on providing means for the public to provide decision makers with rich information in various forms, enhancing the decision makers' possibility to understand stakeholders' views, values, and opinions and thus take this into account in public decision making.

2. MULTI-MODAL COMMUNICATION AND PUBLIC DECISION-MAKING

The rationale for the research project "Multi-modal Communication for Participatory Decision Making" is that there is a great need for further research focusing on how to offer means for general stakeholders (such as the public and NGOs) to provide their views, concerns, and opinions; not only to provide well-informed decision-makers but to actually take part in the decision making process in creative ways. However, there is currently little to offer besides web-based platforms based upon a conventional usage of images and text. Although such techniques contain the means allowing for interaction, they are to a great extent locked into traditional ways of using computer-based text and images, severely reducing the capacities for communicating on controversial and difficult societal issues. These tools are also often locked in an instrumental attitude towards democracy as a mean of transferring information from citizen/client to governmental institutions, rather then looking at the citizen as an active and creative participant in a continuous process of democratic governance. Therefore, it is of great interest to investigate techniques and develop tools enabling the enrichment of the forms and content of the communicated between decision makers, various stakeholders, and the general public.

Here, the use of multi-modal interaction is not only an exciting opportunity but rather a key component since e-government must be ready for the mobile web, uninterrupted services, as well as accessible to people with different kinds of disabilities. Access to services will require a set of solutions, including multi-modal access and open source solutions, among others like citizen-relations-management, user-driven information management, and multi-lingual issues. Therefore, in the context of public decision-making and in particular for urban planning, multi-modal communication will be studied using a variety of techniques and tools for the mediation of preferences, opinions, and expressions.

With respect to e-democracy and e-participation, process models, democratic decision making methods, and accompanied tools and means for structured participation have previously been investigated in, e.g. [4]. This includes tools such as web-based platforms supporting public and transparent decision-making processes in an informative and participatory manner, such as the acclaimed open source web platform Gov2demOSS [5]. Other tools include computer software supporting the structuring and evaluation of decision alternatives under multiple objectives and stakeholders, commonly referred to as tools for multi-criteria decision-making. The objective of these tools combined is to enable the use of a process model for public decision making, specifically aimed at the inclusion of the general public, many stakeholders and possibly also many decision-makers and based upon the information and knowledge obtained in this process provide a flexible but formalized structure of a decision issue. For instance, such a process model with accompanied tools and methods has been developed and applied [6][7][8]. To execute the decision steps appropriately, a structuring and evaluation procedure has been developed as an extension to a decision analytic method and tools [9]. The elicitation of decision information such as preferences and priorities from decision makers has recently been further enhanced by studying how groups of political decision-makers desire to express values and priorities [10][11]. This prototyping will thus elaborate current e-democracy decision support systems with means for multi-modal communication, focusing on the communication between stakeholders, citizens and governments. Although the research community has solved many issues concerning collaborative decision making, as above, and the use of various methods for decision support in public decision making, a main concern has arisen in how to involve the public on a much broader scale, not least groups that normally are alienated from democratic processes or have limited capabilities to explore and use available information in its usual shape. We are therefore in a process for formulating a generic method for the incorporation and encompassment of public expressions and opinions in public decision-making.

In this context, arts is one of several ways to explore forms of multimodal mediated participation, and thematic art projects works as a way of prototyping for participatory democracy. Here, prototyping generally refers to the evaluation of design ideas and as a means for communicating ideas to an audience, but it is also a way of exploring new design ideas and to understand the existing user experience and environment[12]. In the art project of concern in this paper, artists study different techniques and ideas about democracy in a particular location and thus aid in obtaining a wider understanding of the citizens in this area, their environment, and as active participants in a participative democratic system. Artists' actions, installations, and role-playing create a direct confrontation with the place and its inhabitants, exploring the dynamic relationships that constitute its context.

3. ART ON THE THEME PARTICIPATION AND DEMOCRACY

Art exhibitions thematizing democracy most often focus on broad principles such as free speech. Looking at major exhibitions, such as *Documenta* in the 90s, the discourse emphasizes the post-Soviet situation, globalization, and terrorism [13][14]. Art and art exhibitions directly talking about local democratic processes are more difficult to take out of context and into the white cube. Here, the context is important for implementation and understanding. Khoj International Artists' Association [15] in Delhi is such an example where artists work in dialogue with space around with different types of community art. La Bomba [16] in Romania is another place where the art serves as an actor for social change. A project that takes place in the Kista-Rinkeby area is Elin Strand Ruin's *Knitting House* where the collaborative creation of an apartment by knitting became a focal point for further discussion of participation and belonging among citizens of Husby [17]. Thomas Liljenberg's and Bo Samuelsson's community-based work in Kista [18], and Thomas Liljenberg, Anders Krüger & Erik Stenbergs work in Vårby gård is also great examples of how art is used to highlight and change the identity of a place[19].

When discussing artists working with issues of democracy, one of the more important references is the work of Group Material in New York where the artist group used the exhibition as a place to discuss AIDS and other current subjects [20]. Austrian WochenKlausur is another artist group that uses art as a platform for social activism [21]. In the exhibition *Public opinion* in Stockholm during the election period they used the exhibition space and its surroundings in downtown Stockholm to demonstrate an alternative way of voting, showing how important the structure of the representative system is for the result. Swedish artist Måns Wranges' work *The Average Citizen* [23] is another attempt to create an alternative to the system, where an average

person is chosen to represent all the citizen in Sweden. Superflex [23] is a Danish artist collective that uses art as a political instrument; they have for example re-created the town of Karlskrona on the web as a way of discussing its organization [24]. In Sweden, Jörgen Svensson [25] often uses art as a way to talk about social and political phenomena, as in Public Safety where international artists were working in the public domain in the small town Skoghall. Interesting current projects include *CHISINAU - Art, Research in the Public Sphere* in Moldovia organized by Stefan Rusu where artists examines post-Soviet identity politics [26]. A current project in Huddinge, Stockholm is *A radical change of scenery* where artists created a "black box" for discussion about the development of the city[27][28].

Another aspect of the theme is how technology can (or can not) demonstrate and change social structures and thus operate in an emancipatory direction and to broaden democratic participation. Johanna Gustafsson Fürst and Rebecca Forsberg are some of the artists who explore communication technology applications related to location. In *I'm Your Body* they are using mobile GPS technology to create a parallel public place within Kista-Rinkeby [29][30]. Another artist who uses mobile technology to transform the perception of the local site is Christian Nold [31]that has been visualizing people's emotions in different places and recreating maps using the emotional information. Ashok Sukumaran [32] uses media technology to break up habitual ways of looking at a place spatial and social relationship. This can be done in a low-tech way using mirrors as a way of redirecting the light to certain aspects of the surroundings. Sometimes more complex arrangement is used as in *Glow Positioning System* where the citizens of Mumbai were given the tools to "scroll" the landscape interacting with the lights on the buildings surrounding a square.

Mass-distributed collaborative processes such as crowd-sourcing and open source are also an aspect of the technology that is interesting from a democratic participatory perspective. Harrell Fletcher & Miranda July [33] and Aaron Koblin[34] are some well-known artists who use the Internet as a way to involve many participants directly in the creative process. To name a few references from the contemporary art scene that has been important in the development of the project.

4. ART AS REFLECTIONS ON THE CONSTRUCTION OF MEANING

Within the framework of the arts organisation Association for Temporary Art [a: t] (Åsa Andersson Broms and Nils Claesson et al), Karin Hansson previously carried out a series of thematic art projects an exhibitions related to information society and changing conditions for democracy: *Best before - on the Information Society*, Tensta Konsthall [35], *The Art of Organizing*, Gallery Enkehuset [36], *Money - a commentary on the new economy* [37] and *Public Opinion* [38]. Several of the involved artists have been working with different types of media art, but the work has never been technology driven. Rather, art has been a means to critically examine technology-driven processes and technological determinism. Above all, they have seen technology as a way to Do It Yourself, to create own institutions for art. Central for the work has thus been the collaboration between artists. The ambition has been a joint development of themes in which the group exhibition works as a special form of knowledge building. This has similarities with Frigga Haug and others method memory work, a feminist qualitative method that

uses memories of individuals to investigate norms and social structures. In this prototyping project, we take note of similarities between the memory work approach and the thematic group exhibition and create our own method of collective knowledge production.

There are several qualitative methods that are interesting to compare with the reflexive artistic knowledge process. Such as life-course studies by its focus on the individual construction of identity and creation of meaning, and the processes which link the individual to the structural [39]. Other methods, that like memory work is about researching the self is narrative, autobiography, auto-ethnography and life histories. What distinguishes the memory work method from other methods for researching on oneself is that memory work is not about actual memories, but focuses more on the construction of meaning and identity that takes place in the discussions of memories [40]. What is also important in memory work is that it is liberating. Liberating research is not so much about "giving informants vote " in a focus group or in an interview where the 'voices' then are interpreted by the researcher / expert, instead the aim is to create processes in which the participants themselves participates in the analysis [41]. The method is based on a social constructionist approach to knowledge, where the only thing we can know is how people create and understand reality and their own conduct in this [42]. The focus is not on how "it really was" but on how we interpret our recollection of something [43]. How we understand ourselves through our memory stories. Through an analysis of personal experiences, an understanding of general phenomena is reached. The memory work method emphasizes the importance of social relationships for identity formation and the power hierarchies in these relationships [42]. The memory work method derives mainly from two theoretical traditions within the interpretative paradigm: hermeneutics, by requiring an interactive constructive process of knowledge, and phenomenology by stressing the importance of perceived experience in knowledge performance [40]. To understand the world hermeneutically is an on-going process of interpreting data in relation to our own experience [44]. The use of experience as a tool for academic analysis is based on Husserl's systematic attempt to examine the subjective unconsciously [40]. Husserl argues that we can reach a general understanding of a phenomenon by understanding the individual's experiences. But to get to the underlying experience one must see through cultural norms and behaviour patterns. The memory work method is specifically intended to reach to the underlying experience. To achieve this, one begins by describing the individual's own conscious memories. The collective analysis of each memory is then intended to find the underlying conflicts and to detect the cultural norms and behaviours involved, the very reason that the memory has become a memory.

The artist's subjective basis of knowledge production can be seen as an antithesis to the researcher's aim to be as objective as possible. But the sociology of science shows that the researcher's body is the subjective point of departure in science as well [45]. One of the differences is that the researcher's motives are rarely taken under the microscope (although this is now becoming an important part in qualitative methodology), unlike the visual arts where the own subjective experience of the world always is in focus. One of the main objects of investigation in art is the artist. Visual art practice involves several methods to examine this object. Conventional art education can be said to be a mixture of perception exercises and therapy. The aim is an understanding of

how vision is affected by perceptive and cognitive processes, and to find ones own focus on the field of art by talking to senior artists. Thus the artist can be seen as an expert on self-reflection. Self-reflection is reinforced to ensure the quality of qualitative methodology such as Grounded Theory [45]. Bourdieu [47] suggests that the researcher brings her self into the investigation as part of the empiric materials, as the researcher's body is an important part of knowledge making. What distinguishes the artist and researcher in this perspective is documentation. The artist rarely uses memos describing the process in forms that fits in an academic context.

Except for the lack of documentation, the work with a thematic art exhibition has many similarities with the qualitative research method of memory work. The artist most often departs from his or her subjective experience of the theme and focuses on the elements that he/she thinks are interesting. What is interesting most often means some form of unresolved conflict that chafe at the individual or societal level. Art is to a great extent to express the subjective experience/interest on a structural level where others can read it. The collective process in a group exhibition where artists share their ideas and reflections with each other, at best, works as a collective "memory work" where the discussion of ideas creates an understanding of underlying conflicts and detects the involved cultural norms and behaviours, the very reason that art has become art.

5. PROJECT OUTLINE

A main concern in the research project *Multi-modal Communication in Participatory Democracy* is how to involve the public participation on a much broader scale. Based on the idea that the art exhibition can be used as a qualitative research method, and from the viewpoint of prototyping as a way to explore design conditions, we employ an art exhibition in the public space as a way to better understand the condition for participatory democracy at a certain location. Starting from a designated place, the suburb of Kista-Rinkeby, and inviting artists with different perspectives to shed light on the place and the theme participatory democracy, problems and areas of focus are generated for the main research project. To avoid locking into just one perspective, the invited artists approach the subject from a multitude of angles: community art, urban installation art, street art, activist art, artists using locative and interactive media, as well as role playing games. The art genre is not important here; the common denominator is that the artists work with situation-specific emancipatory art that in various ways relates to the physical and the mediated public sphere. In common seminars with artists and researchers these artistic perspectives are discussed from the aspect of participatory democracy and research on multimodal communication.

The aim with the art project *Performing Structure* [48] is to put the site and the individual in a web of geographical, social and economic contexts. For the art project to developed internally, within the group of artists, and develop in a collective process the artists explores the memory work method in a common memory on the theme of power / powerlessness.

This project contributes to the discussion of artistic research by showing how art can be viewed as a qualitative method; Art as a way to highlight and explore discursive practices. Through the practice of the memory work method we contribute to the development of this methodology, and map out a space for art in the field of science.

6. ACKNOWLEDGMENTS

7. REFERENCES

[1] Baringa, Ester & Lena Ramfeldt. 2004. *"*Kista-The Two Sides of the Network Society"*. Network & Communication Studies* Ding, W. and Marchionini, G. 1997. *A Study on Video Browsing Strategies*. Technical Report. University of Maryland at College Park.

[2] Sassen, Saskia. 1996. *Losing control?: sovereignty in an age of globalization*. New York: Columbia University Press.

[3] Sverige. Utredningen om makt, integration och strukturell diskriminering (2006). *Arbetslivets (o)synliga murar: rapport*.[Sweden. The study on power, integration and structural discrimination (2006). Working Lifes (in) visible walls: report] Stockholm: Fritze.

[4] Ríos Insua, D., G. E. Kersten, J. Rios, and C. Grima. 2007. "Towards Decision Support for Participatory Democracy," *Information Systems and E-Business Management* 6(2), pp. 161-191.

[5] Karamagioli, E. and V. Koulolias. 2008. "Challenges and barriers in implementing e-participation tools. One year of experience from implementing Gov2demoss in 64 municipalities in Spain," *International Journal of Electronic Governance* 1(4), pp. 434-451.

[6] Danielson, M., L. Ekenberg, A. Larsson, and M. Riabacke. 2010. "Transparent Public Decision Making - Discussion and Case Study in Sweden," in D. R. Insua and S. French (eds.), *e-Democracy: A Group Decision and Negotiation Perspective*, Springer, 2010.

[7] Sundgren, D. M. Danielson and L. Ekenberg. 2009. "Warp Effects on Calculating Interval Probabilities," *International Journal of Approximate Reasoning*, Vol. 50, Issue 9, pp. 1360–1368.

[8] Ekenberg, L. Ekenberg, J. Idefeldt, A. Larsson and S. Bohman. 2009. "The lack of Transparency in Public decision Processes," *International Journal of Public Information Systems,* Vol. 2009:1, pp. 1–8.

[9] Danielson, M., L. Ekenberg and A. Larsson. 2007. "Distribution of Belief in Decision Trees," *International Journal of Approximate Reasoning,* Vol. 46, Issue 2, pp. 387–407.

[10] Danielson, M., L. Ekenberg, A. Ekengren, T. Hökby and J. Lidén. 2008. "A Process for Participatory Democracy in Electronic Government," *Journal of Multi-Criteria Decision Analysis*, Vol. 15, pp. 15–30.

[11] Danielson, M., L. Ekenberg and A. Riabacke. 2009. "A Prescriptive Approach to Elicitation of Decision Data," *Journal of Statistical Theory and Practice* 3(1), pp. 77–88.

[12] Bucheneau, M and Suri, J. 2000. Experience prototyping. ACM Library.

[13] Enwezor, Okwui ed. 2002. Democracy unrealized. Ostfildern-Ruit: Hatje Cantz

[14] Documenta. 1997. Politics poetics: documenta X - the book. Ostfildern: Cantz Vlg

[15] Khoj International Artists' Association. 2011. Organisation web page http://www.khojworkshop.org 2011-01-18.

[16] La Bomba Studio. 2011. Organisation web page http://www.labombastudios.ro/ 2011-01-18.

[17] Husby gård. 2010. Web page presenting the art project "The Knitting House" by Elin Strand Ruin. http://www.husbygard.nu/knittinghouse.html 2011-01-18.

[18] Kista Art. 2011. Organisation web page http://www.kistaartcity.com 2011-01-18.

[19] Liljenberg, Thomas. 2011. Artists homepage http://www.thomasliljenberg.se/works/ 2011-01-18.

[20] Wallis, Bryan.1998. Democracy: A Project by Group Material (Discussions in Contemporary Culture). New Press.

[21] Zinggl, Wolfgang .2001. WochenKlausur: Sociopolitical Activism in Art. Springer.

[22] Wrange, Måns (2011) *The Average Citizen*. http://www.averagecitizen.org 2010-01-19.

[23] Superflex (2011) Organisation web page http://www.superflex.net 2011-01-18.

[24] Madsen, Kim Halskov (2003) Production methods: behind the scenes of virtual inhabited 3D worlds, Volume 1. London: Springer Verlag

[25] Svensson, Jörgen. 2011. Artists homepage http://www.jorgensvensson.se 2011-01-20.

[26] Ksa:k Center for Contemporary Art. 2011. Organisation web page http://www.art.md/2010/sfera_publica_prezentare_en.html 2011-01-18.

[27] Konstfrämjandet. 2011. Web page presenting the art project http://www.konstframjandet.se/portal/index.php?option=com _content&task=view&id=242&Itemid=28 2011-01-18.

[28] Magnusson, Ann ed. 2010. Att dela ett samhälle [Dividing a community]. Stockholm: Kulturförvaltningen Stockholms läns landsting.

[29] Gustavsson Fürst, Johanna. 2011. Artists homepage http://gustafssonfurst.se/ 2011-01-18.

[30] Department of Computer and Systems Sciences, Stockholm University. 2011 Web page presenting the project *I'm Your Body*. http://dsv.su.se/omdsv/aktuellt/kistateater_antigone 2011-01-18.

[31] Nold, Christian. 2011. Artists homepage http://www.softhook.com/ 2011-01-18.

[32] Sukumaran, Ashok . 2011. Artists homepage http://0ut.in/ 2011-01-18.

[33] July, Miranda & Harrell Fletcher. 2011. The web project Learning To Love You More http://www.learningtoloveyoumore.com/ 2011-01-18.

[34] Koblin, Aron. 2011. Artists homepage http://www.aaronkoblin.com/ 2011-01-18.

[35] Tensta Konsthall. 1999. *Best before - on the Information Society*. Presentation of the art exhibition: http://temporaryart.org/best_before/ 2010-01-19.

[36] Gallery Enkehuset. 2000. *The Art of Organizing*. Presentation of the art project: http://temporaryart.org/artoforganising/ 2010-01-19.

[37] House of Culture in Stockholm. 2001. *Money - a commentary on the new economy*. Presentation of the art exhibition: http://temporaryart.org/money/ 2010-01-19.

[38] The House of Culture in Stockholm. 2002. *Public Opinion*. Presentation of the art exhibition http://temporaryart.org/publicopinion/ 2010-01-19.

[39] Elder, G. Jr & Shanahan, M. 1997. Oppvekst, sosial endring og handlingsevne. Et livsløpsperspektiv. In: I., Frønes. (Ed.). *Livsløp.oppvekst, generasjon og sosial endring*. Universitetsforlaget. Oslo.

[40] Markula, P. & Friend, L. 2005. Remember when… Memory-work as an interpretive methodology for sport management. *Journal of Sport Management*, 19, 442-463.

[41] Evans, Robert & Inna Kotchetkova. 2010. Qualitative research and deliberative methods: promise or peril? *Qualitative Research* 9 (5): 625-643

[42] Small, J. 2007. Memory-work: an introduction, *UTS epress*, http://epress.lib.uts.edu.au/dspace/handle/2100/412 2010-10-18.

[43] Bivald, Katarina. 2006. Forskning, makt och systerskap - Metodologiska aspekter av emancipatorisk feministisk forskning. [Research, power and sisterhood - Methodological aspects of emancipatory feminist research.] Thesis in Sociology at Södertörn University.

[44] Gadamer, Hans Georg. [1959] 1988. "On the Circle of Understanding", pp. 68-78 in J. Connolly and T. Keutner (ed.), *Hermenutics Versus Science, Three German Views: Wolfgang 9 Stegmüller, Hans Georg Gadamer, Ernst Konrad Specht*, Notre Dame: University of Notre Dame.

[45] Gislén, Ylva. 2003. Rum för handling: kollaborativt berättande i digitala medier. Diss. Ronneby : Tekn. Högsk.

[46] Corbin, Juliet M. & Strauss, Anselm L.2008. Basics of qualitative research: techniques and procedures for developing grounded theory. 3. ed. Thousand Oaks: SAGE.

[47] Bourdieu, Pierre. 2007. *Sketch for a self-analysis*. Cambridge: Polity.

[48] Performing Structure. 2011. Art project web page http://www.performingstructure.se 2011-10-01.