Action research in planning education

Experiences from problem-oriented project work at Roskilde University

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Martin Severin Frandsen and John Andersen *

ABSTRACT

This article presents experiences and reflections from two cases of problem-oriented project work working with action research in bottom-up urban planning and sustainable transition in Copenhagen. The first case concerns the involvement of local residents in the redesign of a public square through a series of aesthetic experiments. The second case concerns an experiment with alternative transport solutions and sustainable street transition through reduction of private car use and the creation of new public spaces on former parking lots. The article concludes that action research seems to be a promising way of involving students in processes of planning and sustainable urban transition. Seen from the perspective of external stakeholders, the students can make valuable contributions to the exploration of the potentials of places and the possible futures of communities, and they can assist in providing a knowledge base for planned experiments and initiatives. Seen from the perspective of the students, doing action research strengthens their understanding of "the logic of practice" and their ability to master practical and ethical judgments in complex real-world empowerment and learning processes.

Keywords: Planning education, action research, sustainable transition, problem-oriented project learning (PPL), social learning, empowerment.

INTRODUCTION

In 2009, Roskilde University (RUC) launched a new program in urban planning (Plan, By & Proces/Planning Studies). The purpose of the new program was to educate planners that could supplement the traditional planning professions of the architect and engineer

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and on a theoretically informed basis would be able to design and facilitate interdisciplinary and participatory planning processes. From the start, action research was a core part of the curriculum and was taught in both courses and tried out in problem-oriented project work, the key element in the so-called "Roskilde University model" of problem-oriented participant-directed project learning (PPL) (Andersen & Heilesen, 2015).

Whereas there is growing body of research literature on action research in higher education, there seems to be almost no studies that directly link action research to the principles of problem-based or problem-oriented learning (Gibbs et al., 2017; Laudonia et al., 2018; Thorsen & Børsen, 2018). In this article, we will by way of two case studies of action research in problem-oriented project work explore the following research questions: What is the "added value" of doing action research in problem-based learning and problem-oriented project work? And how do we ensure that value is created for all participants in "student-directed" action research?

The criteria for the choice of cases followed Flyvbjergs strategies for information-oriented selection (Flyvbjerg, 2016, pp. 229-233). We chose two atypical cases (extreme/deviant cases in Flyvbjergs terminology). The first case was an unusually successful case that was chosen to obtain knowledge on the potentially "added value" of working with action research in problem-oriented project work and the conditions for successful collaborations between students and external partners. The second case was a more complex and problematic case that we chose to reveal some of the potential tension points and challenges in student-led action research and to discuss strategies to cope with these. The qualitative data for the case studies we collected from field notes from supervision meetings (5-6 meetings with the students per project), communications and feedback from external stakeholders and the final project reports (Nielsen, Ullerup & Fløyel, 2016; Schock et al., 2017; Dahlerup, 2018).[i]

The first part of the article outlines the key theoretical foundation of the Planning Studies (PS) program: planning as social learning and social mobilization. We highlight the affinities between participatory planning and action research and outline a model of prototypical phases in community-based action research. Secondly, we describe the Roskilde University pedagogical model of problem-oriented project learning (PPL). In the third section, we describe how we have worked with action research on Planning Studies in the framework of PPL, exemplified by the two cases of project work. Finally, we reflect on the potentials and challenges of working with action research in problem-oriented project work and draw conclusions in relation to the two research questions.

PARTICIPATORY PLANNING TRADITIONS

The civil rights movement in the US in the sixties and the upcoming urban movements and revolts fundamentally challenged the legitimacy of mainstream planning based solely on technical expert knowledge. Inspired by massive community mobilizations (Jacobs, 1961), critical planners challenged the idea of planning as a value-free activity purely based on "objective" scientific and technical knowledge. The theory and practice of advocacy and participatory planning was born. Drawing on a tradition and "canon" of progressive community activism that can be traced back to the progressive era and pragmatists like Jane Addams and John Dewey (Fisher et al., 2012), advocacy planning (Davidoff, 1965) wanted to put poor people's needs first, facilitate community empowerment and challenge the power of economic, bureaucratic and political elites at all levels. The participatory and social justice-oriented planning tradition (Marcuse, 2011) has, with varying degrees of success, struggled to create a form of planning that emphasized social justice, local needs and the empowerment of citizens.

Planning theorist John Friedman speaks of two participatory planning traditions, *social learning* and *social mobilization* (Friedmann, 1987). In brief, *social learning* is a typically bottom-up orientated form of planning where planners, community workers, citizens and other stakeholders collaborate in common problem solving and mutual learning processes (Frandsen, 2018). Through these learning processes, the capacity for collective problem solving is strengthened while the involved actors learn about themselves and their community. *Social mobilization* is a form of planning based on people's empowerment in social movements with a transformative potential to create more socially just development paths in society (Andersen, 2007). Citizens are here seen as (potentially) empowered collective agents that can 'take back the future'.

PARTICIPATORY PLANNING AND ACTION RESEARCH

The kind of knowledge production that is characteristic of the critical planning traditions is closely related to the participatory knowledge creation that characterizes the action research tradition. Action research facilitates collective action and change while at the same time producing new knowledge. Action researchers see themselves as co-producers of knowledge together with social actors struggling for social justice and people's empowerment: they share a commitment to democratic change (Brydon-Miller & Aragón, 2018).

Social learning-orientated planning has traits in common with Pragmatic Action Research, where the aim is to support social inquiry and problem solving (Greenwood & Levin, 2007; Frandsen, 2016), and it also bears resemblance to the Critical Utopian

Action Research-tradition (CUAR) that has a strong focus on the creation of 'free spaces' and social experiments (Gunnarsson et al., 2016; Egmose, 2015). Planning as social mobilization has strong ties to both the North American (Brydon-Miller, 1997) and the Latin American Participatory Action Research (PAR) traditions (Fals Borda, 2001; Azril, 2018).

In the following, we shall briefly outline a simple heuristic and prototypical model for phases in participatory and community-based action research, drawing upon the sources and action research approaches mentioned above (see figure 1). In other words, we draw upon several traditions and concepts of action research – action research as empowerment facilitation (Andersen, 2007), action research as experimental and social learning (Frandsen, 2018), action research as social innovation (Moulaert et. al., 2013) and the work of Brydon-Miller & Aragón (2018) on the multiple roles of action researchers – from participatory inquiry to advocacy vis-à-vis authorities, trust building, etc.

The starting point is social tensions, everyday troubles and social injustices where some kind of collective action is needed to break away from, to find solutions to or to better cope with the situation. The first phase in the action research process is to make contact and engage in dialogue with the relevant actors and citizens affected by the situation in order to identify possible partners in an action research collaboration based on a joint understanding of the problem(s) that can guide further inquiry.

If this phase works out successfully, the next phase can be a deeper participatory inquiry of the problem and its context, where the creation of contextualized knowledge is linked directly to trust building, awareness raising and development of mutual commitment (horizontal empowerment) in relation to citizens and local stakeholders. Based on this deeper and contextualized understanding, the next step is to jointly create suggestions for collective action and problem solutions with a broader group of citizens and stakeholders. In the following phase, an action committee or coalition (partnership) of actors either with their own resources and/or with support from private foundations or public funds can engage in an experimental test of the problem solution. If the problem solution requires changes at the political level, e.g. changes in legal regulations, public funding, etc., the knowledge and arguments for the problem solution can be advocated in the public and political sphere (vertical empowerment). If the problem solution improves the situation the initial everyday troubles and social conflicts will be reduced.

The final step can be to "upscale" the knowledge, ideas, practical capacity building, narratives, etc. to other communities, organizations and to higher levels: regional, national and transnational levels. If experimentation fails due to opposition or obstruction from political or private actors (e.g. investors and property owners), this knowledge about structural obstacles for progressive change can be shared to the wider public to stimulate

deliberation about transformative empowerment and changing opportunity structures promoting more social justice in society.

In other words, if action research fails in the first round, it does not mean that it is useless. Both less successful experiments or experiments blocked by political and economic elites can be useful for reflection, narratives and deliberation in similar problem contexts. In other words, the learning process in action research consists of both successes and failures (Greenwood & Levin, 2007, p. 109-113).
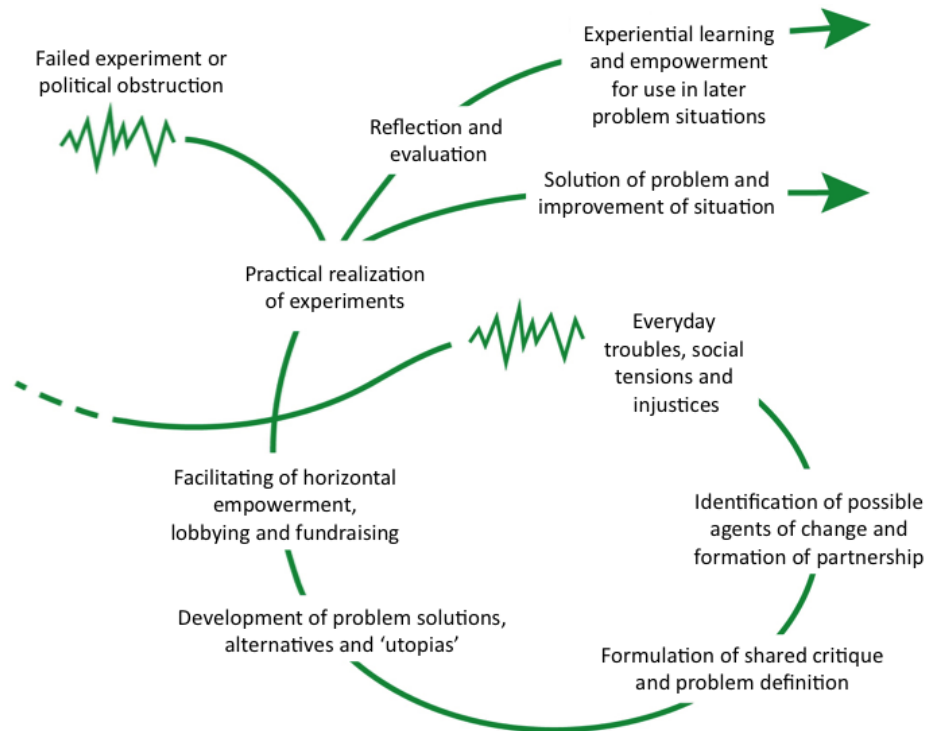

Figure 1: Prototypical phases in community-based action research. Adapted from Frandsen, 2016

As stated before: the above is a prototypical model. As the experienced American (North and South) action researchers Brydon-Miller and Aragón argue, the conditions for action research are extremely dependent on the political, institutional and socio-cultural context, which shapes the way in which the various stages of the action research process can be played out in practice.

"In some cases, the community may be well-established, and […] the process can be focused on bringing the researcher into an existing set of relationships. In other cases, […] more time must be spent in […] building relationships within the community […] Some communities are extremely hierarchical requiring the researcher to negotiate and sometimes challenge systems of power […] while in other cases the lack of any hierarchy at all or any authority makes it difficult to establish communication and to assign responsibility for carrying out tasks. And finally, in some cases communities may be so

divided that nothing can be accomplished until lines of communication and basic trust have been established" (Brydon-Miller & Aragón, 2018, pp. 35-36).

In many cases there will be iteration where the same phases (e.g. problem identification or (re)design of solution strategies) are reworked and repeated again.[ii]

PROBLEM-ORIENTED PROJECT LEARNING (PPL)

The pedagogical model at RUC is based on problem-oriented participant directed project learning (PPL) (Andersen & Heilesen, 2015; RUC, 2017). In practice, this means that 50 pct. of the students' work is dedicated to project work while the remaining 50 pct. consist of courses in different forms, ranging from traditional lectures to experimental workshops. The PPL-model in its original form in the 1970s was strongly influenced by the critical pedagogical ideas of student movements emerging in the late 1960s and the idea that higher education should promote "dual qualification":

"*Firstly, it should provide suitable academic and professional qualifications for today's society, including those of an innovative and creative nature. Secondly, higher education should help students to develop critical judgement, enhance their societal involvement, and increase social equality and justice"* (Andersen & Kjeldsen, 2015a, p. 5).

Although the interpretation of the PPL-model has evolved over time due to changing circumstances and the influence of new pedagogical ideas, most of principles of the original model still exist. The key principles as they are interpreted today are as follows:

1. *Project work*. Project work entails extended work on a well-defined problem and area of study within a given time frame of typically 4 months. At RUC, project work is organized in groups of two or more students. The students control the process under supervision and seek out and evaluate which theories and methods to use by themselves. Project work is based on the model of scientific investigation and inquiry. Students do projects that are similar to the ways in which researchers conduct research projects (Andersen & Heilesen, 2015, p. xi; RUC, 2017).

2. *Problem-orientation*. Project work is problem-oriented. The point of departure for choosing and determining a problem is what Andersen & Kjeldsen term "*the trinity of personal, study-related and societal relevance*" (Andersen & Kjeldsen, 2015b, pp. 24-25). The criterion of personal relevance ensures motivation and engagement, the criterion of study-related relevance ensures that the studies correspond to the curricular requirements, and the criterion of social relevance ensures that the studies are oriented towards existing and real-world social problems. Problem-orientation will thus often be driven by cooperation with stakeholders in society outside the university (RUC, 2017).

3. *Interdisciplinarity*. Problem-orientation is linked to interdisciplinarity. It is the problem of a project rather than a traditional discipline that determines the choice of theories and methods. The interdisciplinary dynamics arise through analysis of complex problems that require solutions across subjects and research approaches (Andersen & Heilesen, 2015, p. xi; RUC, 2017).

4. *Participant control*. Participant-directed learning is manifested in the students' choice of problems and in their own control of the project work under guidance from a supervisor. The terms participant control and participant-directed learning are preferred to the term student-directed learning firstly because project work is supervised by a teacher, and secondly, because projects have to conform to the curricular framework (Andersen & Heilesen, 2015, p. xii; RUC, 2017). To this, we would add that in cases where there is cooperation with stakeholders outside the university, like in action research processes, these collaborators act as a third kind of participant. Finally, with regard to courses, the learning process is more structured according to the subject and is largely determined by the lecturers (RUC, 2017).

5. *Exemplarity*. Exemplarity means that an example or case is studied in such a way that it develops the students' insights into and overview of the investigative practices, methods and theories of the academic fields in question (RUC, 2017). Exemplarity can also mean that the content of project work should be related to and seen as exemplary of broader social and public issues, and that the examples the students choose can be related to their own experience and as well as to the social conditions that influence their experiences (Andersen & Kjeldsen, 2015b, p. 25-27).

6. *Group work*. Project work is conducted in groups, and group work is also used in courses or workshops ranging from, for example, reading groups to smaller group exercises and "mini-projects". The main arguments for group work are that it promotes individual and collective cognitive processes and development, that it can illustrate a problem more comprehensively and more in-depth than the individual student can achieve alone, and that the academic discussions within the group establishes a mutual learning process (RUC, 2017).

It is evident that the PPL-model shares basic pedagogical principles with the variety of approaches that constitute PBL (Savin-Baden & Major, 2004). One of characteristics of PPL is that the emphasis on the students' participation in the formulation of problems is particularly strong (Andersen & Kjeldsen, 2015a, p. 14). This key element can be traced back to the early formulation of PPL in the writings of Knud Illeris. According to Illeris, a problem is a problem in the psychological sense only if it is formulated and chosen by the person who has to work with it:

"*If the solution, or at least the elucidation of the problem, does not appear as a personal challenge, the conditions for accommodative learning are not present and thus neither*

the conditions for the development of creativity and flexibility (...) Accommodative learning is a demanding process that requires commitment. You accommodate only in situations that are relevant to yourself and what you are doing (Illeris in Andersen & Kjeldsen, 2015a, p. 7-8).

Students, however, have to argue for the relevance of the problem they choose to work with according to the trinity of personal, study-related and societal relevance as described above. At the same time, students in many cases start out from project ideas or suggestions proposed by supervisors or external stakeholders. In these cases, "… *it is crucial that the proposals from the supervisor [or external stakeholder] are very brief so that the students can personalize the idea and make their own investigations and reflections in order to formulate a genuine problem for the project*" (Blomhøj et al, 2015, p. 99).

ACTION RESEARCH IN PLANNING STUDIES

The relatively extensive time frame of project work at RUC of typically 4 months, together with the principles of problem-orientation and participant control, provides a distinct opportunity structure for doing action research with stakeholders outside the university, which to some extent makes it possible to escape from some of the institutional challenges for action research in contemporary universities (Thorsen & Børsen, 2018, p. 192) and from what Greenwood terms "academic Taylorism" (Greenwood, 2012, p. 119).

In the Planning Studies-program we have taught action research in courses and promoted action research in project work by facilitating "matchmaking" with external partners through meetings at the start of each semester where stakeholders – ranging from NGO's, community activists, social housing associations to municipal planning departments – present ideas for possible cooperation.

ACTION RESEARCH IN COURSES

Teaching students action research within the framework of courses can be seen as a preparation for working more independently with action research in project work. The PS courses introduce the historical roots and principles of action research, present concrete cases of action research in cities and communities conducted with various stakeholders, i.e. community development projects, local councils, activist groups and "ordinary citizens", and provides a framework for the students to try out action research in "mini-projects".

In PS we have experimented with different activities that are often located in urban or rural neighborhoods outside university walls. It is one thing to lecture on the epistemology and methodology of action research – it is another thing to develop the multiple "hands on" skills required to practice action research (Brydon-Miller & Aragón, 2018). This requires experiential learning processes with "live cases". It is our (and the students) clear judgment that placing courses *on location* makes a big difference (Rask and Andersen, 2016). It gives a completely different feeling to be in the thick of things, and it creates the possibility to organize city walks, mapping exercises, informal interviews on the streets and for relationship building and dialogues with local stakeholders and citizens.

The aim of the courses are to show, *in germ form,* how action research can contribute to empowerment and learning among citizens and produce input and proposals for planning that is based on local needs. Through "mini-projects", students are trained to analyze development plans for the neighborhood, to design and use different methods for citizen involvement and community mapping, to conduct interviews with local stakeholders and to develop and sometimes realize small scale initiatives and plans of their own. All of it to identify local needs and facilitate a shared problem definition among local citizens and stakeholders, to formulate proposals and visions for local planning and to develop the capacity to realize these.

ACTION RESEARCH IN PROBLEM-ORIENTATED PROJECT WORK – POTENTIALS AND CHALLENGES

To a large extent, problem-orientated project work provides an ideal framework for working with action research within planning education. The starting point for project work is typically concrete and practical public planning issues and, in comparison with the courses, the time frame is longer, with projects running for 4-5 months from the project's inception to its conclusion.

Working with action research in project work is, however, still somewhat of a balancing act. Even though the time frame is relatively long compared to the time allowed for in courses, it is still a short time frame in comparison with the time frame that characterizes a "real" action research project, where the researcher often engages in longer running collaborations that sometimes go on for several years. There is therefore a risk that the collaboration becomes a frustrating experience for both students and external stakeholders, entailing what Thorsen and Børsen term a "breach of expectation" (Thorsen & Børsen, 2018, p. 185) because the hopes for realizing an action or experiment that is valuable for both the students and the external stakeholder are not met.

Case 1: Aesthetic experiments

In the following, we will outline an example of successful action research collaboration between a group of students from PS and an external partner in the form of a so-called "area renewal project", *Områdefornyelsen Indre Nørrebro*, in the inner-city neighborhood of Nørrebro in Copenhagen. "Area renewal" is a 5-year integrated urban renewal program targeted at disadvantaged neighborhoods and housing areas. The integrated area renewal project was launched in 2014 in the inner part of Nørrebro, which underwent a prior urban renewal effort in the 1980s where many buildings, including tenements, were torn down. The renewal project in the 1980s was met with strong protests from local residents and sometimes led to violent conflict. Many of the new urban spaces that were created have subsequently shown not to be accommodating spaces for the social life of the neighborhood. To make up for the errors of the past, the current area renewal project aims at involving local citizens in the redesign and improvement of a number of the central squares and spaces in the neighborhood.

Experiences from earlier recent area renewal projects had shown that collaboration with student groups could sometimes be time demanding, and the investment from the planners in the urban renewal project did not always yield a return in the form of valuable knowledge once the student groups had completed their project. Sometimes, students forgot to report their findings in an accessible way to the external partners once they had finished their exams and had moved on to the next project. In other cases, the students were seen as having a poor understanding of "the logic of practice" in a real-world context and their analysis, evaluations and judgments seemed to rest on very idealistic assumptions about planning with little value as practical guidance.

To make better use of the work of the students, the new area renewal project developed a practice of involving student groups in experimental test phases in the redesign of the local squares and urban spaces. The students, through experiments with smaller workshops, design-prototypes and events, could map out and explore the potentials for future development before the area renewal project itself began the more permanent redesign and renewal process. Seen from the Planning Studies' and the students' perspective, the advantages of this type of partnership was that the area renewal project – in exchange for the practical experimentations of the students – made a lot of resources available in the form of local knowledge and gate keepers, that helped to make action research possible within the time allowed for to do project work.

After themselves making contact with and consulting the area renewal project, a group of students doing their master's thesis chose to work with the renewal of a small local square named after the local and still existing social settlement "Askovgården". The theoretical and methodological starting point was a combination of diversity planning (Sandercock, 2004) and arts-based action research (Brydon-Miller et al., 2011). From this starting point, the students drew the hypothesis that artistic and aesthetic methods held particular

potentials to engage a diverse group of residents, because aesthetic impressions and experiences speak to both emotions and to the imagination and communicate in a direct way to the everyday life of citizens (Nielsen, Ullerup & Fløyel, 2016. pp. 9ff).

To test this hypothesis, the group designed a series of 4 aesthetic experiments with new forms, colors and materials and sought to engage local residents and organizations in all phases of the process. The whole process ran for 2.5 months and was divided into three different phases: a prelude, realization of 4 aesthetic experiments and an evaluation.
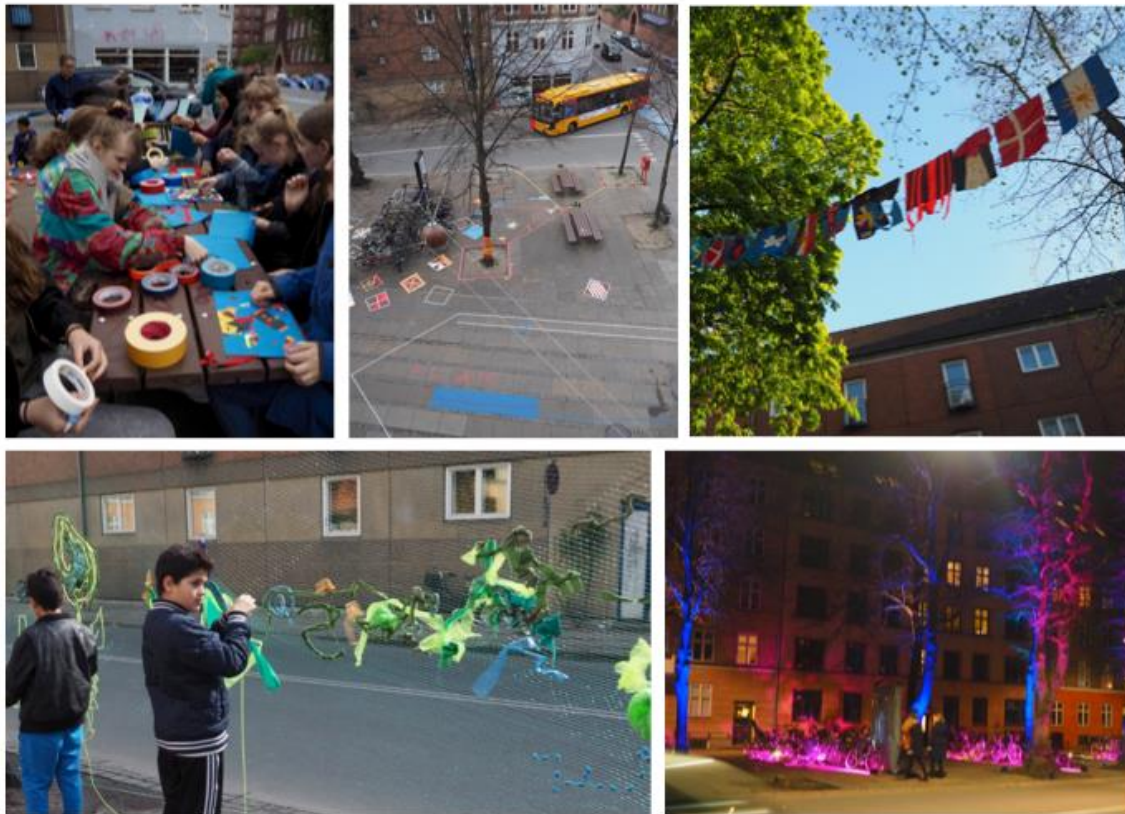

Figure 2: Impressions form the 4 aesthetic experiments. Clockwise from left to corner: Children creating flags in the experiment Sky Space, street patterns made from colored tape form the experiment layouts, flags from the experiment Sky Space, decorated wire from the experiment Spaces in The Space and light installation from the experiment Lightning (Photos: A. K. Nielsen, S. B. Ullerup & S. Fløyel)

Although several obstacles were encountered on the way, the experiences from the experiments to a large extent confirmed the students' guiding hypothesis. Already the first aesthetic experiment showed that it did not take much more than a couple of people and a pile of colored tape to engage a diverse group of citizens and change their image of what is possible in a given place. The activities that took place while the experiments unfolded drew people's attention and a broad group of people involved themselves out of curiosity and joy. The aesthetic experiments created a space where a diverse group of

citizens could express themselves physically and practically and not only through words. They created an "aesthetic free space" on the square, where citizens on their own terms could get involved and develop and try out alternatives. The process became the focal point of *"a learning process at both an individual, social and cultural level, whereby participants [could] gain new perspectives on themselves, each other and the ordinary everyday life at Askovgårdens Plads"* (Nielsen, Ullerup & Fløyel, 2016, p. 78).

Case 2: Sustainable street transition – from parking lots to community space
The second case of action research in problem-oriented project work concerns an experiment with sustainable transition in the local street Badensgade in the neighborhood of Amagerbro also in central Copenhagen. In contrast to the publicly led urban renewal project on Nørrebro, the initiative on Amagerbro was civil society-based and the project was more loosely tied to the municipal planning authorities.

The goal of the project was firstly to explore how the amount of privately-owned cars in the inner city could be reduced, and how the space now reserved for parking could be used for social and community activities. Secondly, the goal was to investigate how local residents themselves could lead a sustainable transition and transform and manage urban spaces. To achieve these goals, the experiment involved two logically linked subprojects: The first subproject aimed at reducing the local dependency on private cars through locally based initiatives like carpooling, introduction of a local bicycle library, arrangement of delivery services with local shops, free advice on sustainable transport solutions, etc. The idea behind the second subproject was to involve the local residents in the design and co-creation of temporary and mobile urban furniture for community activities to explore the possibilities for future use of the space potentially freed from car parking.

Two aspects of the experiment on Amagerbro made it more complex and potentially conflictual than the renewal project on Nørrebro. The resident-led approach and the loose ties to the municipality made the collaboration with the planning authorities more difficult, and it meant that the experiment ran into more obstructions. At the same time, the potential removal of local parking spaces – creating less favorable conditions for private car ownership – was a potential subject of controversy internally among the residents. These difficulties also complicated the situation for the student project groups doing action research in partnership with the local stakeholders.

The project was initiated by the homeowner association in Badensgade together with architect and urbanist Henrik Valeur, who had a long record with participatory planning locally and internationally (Valeur, 2014). Valeur had been looking for a neighborhood in Copenhagen that was willing to take part in experiments, where the aim was to reduce car use dependency and to redesign public places. The connection to Badensgade was made with the help of the local center for environment (Miljøpunkt Amager) and the local

district council (Amager Øst lokaludvalg). The project was presented to the residents on a general assembly in the homeowners' association in May 2017, where Valeur received support to carry on with the project (Schock et al., 2017, p. 15). Following the meeting, Valeur and the board were successful in obtaining initial funds from the municipality for a pilot study to develop the project and later from the Danish Arts Foundation for the actual realization of parts of the experiment.

As part of the pilot study, alongside with developing the project brief, organizing a workshop for the residents, etc., Valeur contacted Roskilde University and Planning Studies with the aim of establishing partnerships with student project groups that could support the development and practical realization of the experiment. The experiment was presented for the students as part of the start of term activities and in the following year, first a project group on master's level, and later a thesis student, collaborated with the project (Schock et al, 2017; Dahlerup, 2018).

The contribution of the first project group was tied to the pilot study and the development of a knowledge base for the experiment. The focus of the project was to investigate the mobility habits of the local residents and to inquire into their views and perspectives on the development of alternative transport solutions and transformation of the street. The group conducted 68 short interviews with residents followed by a focus group with 6 residents (Schock et al., 2017, pp. 26- 38).

Whereas in the previously described case on Nørrebro there had been little contact and communication between the university supervisor and the external stakeholder and partner, the collaboration with the first project group showed that the more complex and potentially controversial project on Amager demanded a closer collaboration and alignment between the student group, the supervisor and the external action research partner to make sure the student project would contribute positively to the experiment. As mentioned, the potential removal of parking spaces was a "touchy" subject among the local residents that had to be dealt with delicately. This meant that the aim and purpose of the experiment had to be communicated carefully to the local residents to prevent misunderstandings that could potentially create local opposition. The actions and interventions of the student group thus to a larger extent needed to be co-designed in collaboration between the students, the supervisor and the external partner.

A further complication for the action research partnership occurred when the Badensgade-project reached the planned phase of realization in the spring of 2018. As mentioned, the idea behind the second subproject was to design temporary and mobile urban furniture in the space potentially freed from car parking – in other words, this meant occupying parking space on the road surface.
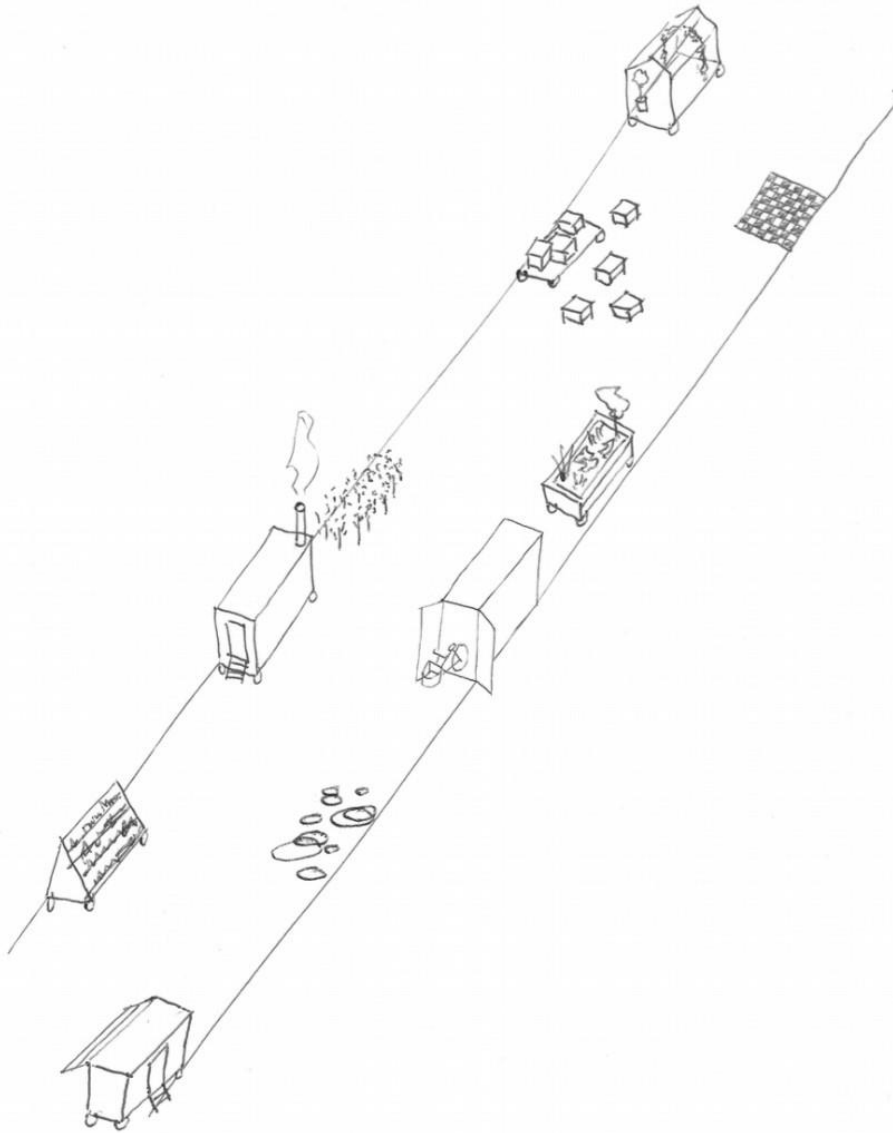
Figure 3: Sketch of planned furniture and installations. Sketch: Henrik Valeur.

The 320-meter long street of Badensgade has a legal status of "private community road", which means that the homeowners' association holds a certain authority over the street. However, they must comply with requirements for technically sound facilities, and they must ensure that the road is in good and proper condition and that private dispositions do not violate public planning and safety measures (Schock et al., 2017, p. 12). Although the temporary occupation of parking spaces was approved by the general assembly in the homeowners' association, the approval from the municipal planning authorities proved to be a much more complex and complicated affair due to the technical and safety issues involved in using the spaces on the actual road – and not just the pavement. As a consequence, the experiment had to be postponed for an indefinite period and most of the experiments planned for the summer of 2018 had to be canceled. This situation also

caused complications for the master's thesis student who was collaborating with the project at the planned stage of realization. Whereas the initial idea behind the action research collaboration was that the student should contribute to the practical experimentations, the thesis project had to be re-orientated to focus more on uncovering the obstacles and difficulties for citizen-led bottom-up planning initiatives (Dahlerup, 2018).

Although most of the activities planned for the summer of 2018 had to be postponed, one activity was realized in the form of a prototype of the intended temporary and mobile urban furniture for community activities – without the official permission of the authorities.

Figure 4: Co-creation of street furniture. Photo: Henrik Valeur.

CONCLUDING REFLECTIONS

In conclusion, we will propose some answers to the two research questions on the basis of the case studies. Firstly, we asked: "How we can ensure that value is created for all participants in "student-directed" action research and project work?" The case studies indicate that collaborations work out best when local stakeholders and gatekeepers have

clearly defined needs and a commitment to collective action, while at the same time being open for meeting the students personal and academic motivations. Collaboration with students in experimental test phases or pilot projects seems to be a promising way of involving students in processes of planning and sustainable urban transition. Seen from the perspective of the external stakeholders, the students can contribute with valuable insights in the exploration of the potentials of places and the possible futures of communities, and they can also assist in providing a knowledge base for planned experiments and planning initiatives. In exchange, the students, from their perspective, are offered proposals for projects of societal relevance that they can choose from and personalize, and they are also given access to local knowledge and gatekeepers that can help to make smaller action research projects possible within the time frame of project work.

In some cases, like the project on aesthetic experiments in Inner Nørrebro, the students can make contact with and create partnerships with external stakeholders with little facilitation from the university**.** In other and more complex cases where the potential for conflict is greater, like the case in Badensgade on Amager, alignment of interests, approaches and methods between students, supervisors and external stakeholders needs to be facilitated more in depth, as tensions between students and external stakeholders can occur in the process.

In most cases there are also tensions between the requirements of the action research work and the annual cycle and timetable of academia. Our conclusion here is in line with Pain et al. (2006), who state that coping with these "productive tensions" is a condition for following an action research orientation. Successful collaborations thus depend on close and flexible supervision of the students in order to make sure that the cooperation with the external partners can work and that the students can meet the requirements and time schedules given by the study program.

Secondly, we asked: "What is the "added value" of doing action research in problem-based learning and problem-oriented project work?" Our overall assessment from the case studies is that action research based on project work in local neighborhoods is a powerful tool for "double qualification" and education of engaged participatory planners. The huge potential with regard to learning outcomes is that students can complement academic skills with skills to engage and navigate in complex non-university contexts with different (and in some cases) potentially conflicting stakeholders. Students can develop a better understanding of "the logic of practice" and acquire the ability to master practical and ethical judgements in complex "real life" empowerment and learning processes. In relation to the goal of double qualification, this both prepares them for professional practice and provides them with an "embodied" and pragmatically empowered critical understanding of how processes of change and transformations towards a more sustainable and just society can be brought about.

References

Andersen, J. (2007). Empowermentperspektivet i planlægning. In Jensen, E. et al. (Eds.), *Planlægning i teori og praksis* (pp. 46-63). Frederiksberg: Roskilde Universitetsforlag.

Andersen, A. S. & Heilesen, S. B. (Eds.) (2015). *The Roskilde Model: Problem-oriented Learning and Project Work*. Cham, Switzerland: Springer.

Andersen, A. S. & Kjeldsen, T. H. (2015a). Theoretical Foundations of PPL at Roskilde University. In Andersen, A. S. & Heilesen, S. B. (Eds.), *The Roskilde Model: Problem-oriented Learning and Project Work* (pp. 3-16). Cham, Switzerland: Springer.

Andersen, A. S. & Kjeldsen, T. H. (2015b). A Critical Review of the Key Concepts in PPL. In Andersen, A. S. & Heilesen, S. B. (Eds.) (2015), *The Roskilde Model: Problem-oriented Learning and Project Work* (pp. 17-36). Cham, Switzerland: Springer.

Azril, B. (2018). The Promise and Challenges of Transformative Participatory Action Research in the 21st Century – The Legacy of Paolo Freire and Orlando Fals-Borda. In Bilfeldt, A. et al. (Eds.), *Den ufærdige fremtid* (pp. 48-68). Aalborg: Aalborg Universitetsforlag (Serie om lærings-, forandrings- og organisationsudviklingsprocesser, nr. 9).

Blomhøj, M., Enevoldsen, T., Haldrup, M., Nielsen, N. M. (2015). The Bachelor Programmes and The Roskilde Model. In Andersen, A. S. & Heilesen, S. B. (Eds.), *The Roskilde Model: Problem-oriented Learning and Project Work* (pp. 79-106). Cham, Switzerland: Springer.

Brydon-Miller, M. (1997). Participatory Action Research: Psychology and Social Change. *Journal of Social Issues*, 53 (4), 657-666.

Brydon-Miller et al. (2011). The changing landscape of arts and action research. *Action Research*, 9 (1), 3-11.

Brydon-Miller, M. & Aragón, A. O. (2018). The 500 Hats of the Action Researcher. In Bilfeldt, A. et al. (Eds.), *Den ufærdige fremtid* (pp. 19-47). Aalborg: Aalborg Universitetsforlag (Serie om lærings-, forandrings- og organisationsudviklingsprocesser, nr. 9).

Dahlerup, C. (2018). *Konstruerede situationer og sociale byrum – en undersøgelse af Situationistisk Internationales unitære urbanisme og planlægningsprocessen fra bilgade til levende byrum i Badensgade*. Specialeafhandling. Roskilde: Roskilde Universitet.

Davidoff, P. (1965). Advocacy and Pluralism in Planning. *Journal of the American Institute of Planners*, 31 (4), 331-338.

Egmose, J. (2015). *Action Research for Sustainability. Social Imagination Between Citizens and Scientists*. Farnham, UK: Ashgate

Fals Borda, O. (2001). Participatory (Action) Research in Social Theory: Origins and Challenges. In Reason, P. & Bradbury, H. (Eds.), *Handbook of Action Research: Participative Inquiry and Practice* (pp. 27-37). London: Sage Publications.

Fisher, R., DeFilippis, J. & Shragge, E. (2012). History Matters: Canons, Anti-Canons and Critical Lessons from the Past. In DeFilippis, J. & Saegert, S. (Eds.), *The Community Development Reader*, Second Edition (pp. 191-200). New York: Routledge.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry,* 12 (2), 219-245.

Frandsen, M. S. (2016). Pragmatisk aktionsforskning – arven fra Hull House-settlementet. In Bilfeldt, A., Jensen, I. & Andersen, J. (Eds.), *Social eksklusion, læring og forandring* (pp. 59-80). Aalborg: Aalborg Universitetsforlag, (Serie om lærings-, forandrings- og organisationsudviklingsprocesser; Nr. 7).

Frandsen, M. S. (2018). Sociale læreprocesser – John Deweys pragmatisme som udgangspunkt for aktionsforskning. In Bilfeldt, A. et al. (Eds.), *Den ufærdige fremtid (*pp. 69-99). Aalborg: Aalborg Universitetsforlag (Serie om lærings-, forandrings- og organisationsudviklingsprocesser).

Friedmann, J. (1987). *Planning in the Public Domain: From Knowledge to Action*. Princeton: Princeton University Press.

Gibbs, P. et al. (2017). Literature review on the use of action research in higher education. *Educational Action Research*, 25 (1), 3-22.

Greenwood, D. J. & M. Levin (2007). *Introduction to Action Research. Social Research for Social Change*. Thousand Oaks: Sage Publications.

Greenwood, D. J. (2012). Doing and learning action research in the neo-liberal world of contemporary higher education. *Action Research*, 10 (2), 115-132.

Gunnarsson, E., Hansen, H. P., Nielsen, B. S. , Sriskandarajah, N. (Eds.) (2016): *Action Research for Democracy: New Ideas and Perspectives from Scandinavia*. London: Routledge.

Jacobs, J. (1961). *The Death and Life of Great American Cities*. London: Jonathan Cape.

Laudonia, I., Mamlok-Naaman, R., Abels, S. & Eilks, I. (2018). Action research in science education – an analytical review of the literature. *Educational action research,* 26 (3), 480-495.

Marcuse, P. (2011) The Three Historic Currents of City Planning. In Bridge, G. & Watson, S. (Eds.), *The New Blackwell Companion to the City* (pp- 643-655). Oxford: Blackwell Publishing Ltd.

Moulaert, F., MacCallum, D., Mehmood, A. & Hamdouch, A. (Eds.) (2013). *The International Handbook On Social Innovation: Collective Action, Social Learning and Transdisciplinary Research*. Cheltenham: Edward Elgar Publishing.

Nielsen, A. K., S. B. Ullerup & S. Fløyel (2016). *Sanselige eksperimenter – udvikling og afprøvning af et metodisk værktøj, der skal fremme borgerinvolvering i en byfornyelsesproces*. Specialeafhandling. Roskilde: Roskilde Universitet.

Pain, R., Finn, M., Bouveng, R. & Ngobe, G. (2013). Productive tensions – engaging geography students in participatory action research with communities. *Journal of Geography in Higher Education*, 37 (1), 28-43.

Rask, L. & Andersen, J., (2016). *Dimittendundersøgelse 2016: En undersøgelse af undervisningsmetoder og kvalifikationer blandt dimittender fra Plan, By & Proces-uddannelsen på Roskilde Universitet*. Roskilde: Roskilde Universitet (MOSPUS Research Paper Serie; No. 3).

Roskilde University (RUC) (2017). *Pedagogical profile at Roskilde University. Framework Document for RUC's Quality Policy*. Roskilde: Roskilde University.

Sandercock, L. 2004. Towards a Planning Imagination for the 21st Century. *Journal of the American Planning Association*, 70 (2), 133-141.

Savin-Baden, M. & Major, C. H. (2004): *Foundations of Problem-Based Learning*. Maidenhead, UK: Open University Press.

Schock, S., Rudolph, M., Skogbjerg, J., Lium, A. & Voss, S. T. (2017). *Badensgades proces mod en grøn omstilling – et kvalitativt aktionsforskningsstudie om et stedsspecifik og samskabende planlægningstiltage for grøn mobilitetsomstilling*. Projektrapport. Roskilde: Roskilde Universitet.

Thorsen, N. & Børsen, T. (2018) Aktionsforskning på kandidatuddannelsen i Tekno-Antroplogi. In Bilfeldt, A. et al. (Eds.), *Den ufærdige fremtid* (pp. 179-205). Aalborg: Aalborg Universitetsforlag (Serie om lærings-, forandrings- og organisationsudviklingsprocesser, nr. 9).

Valeur, H. (2014) *India: the Urban Transition – A Case Study of Development Urbanism*. Copenhagen: <u>B</u> – Architectural Publisher.

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[ii] The model was developed for the purpose of this article and was thus not drawn on by the students in the two case studies.