Art-based action research in the development work of arts and art education

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ART-BASED ACTION RESEARCH AS A STRATEGY

Art-based action research is a research strategy which guides the progress of research in the cycles of action research and uses art as a catalyst for development work — for example, empowerment or the better design of environments. Art-based action research is usually used in the development projects of art education, applied visual art, and contemporary art. Art serves many purposes in these development processes. Art may be the intervention for problem solving or gaining new knowledge and understanding. Art can also be the subject of development or the tool for the research’s data collection and analysis. Art-based refers to the utilisation of art in research in such a way that stakeholders and members of the organisation or community can be included in the research, and tacit knowledge and experiences can be obtained from them, which are not conveyed through traditional qualitative research methods based on verbal or written language. In this article, we describe the context of art-based action research: the project-based development work of contemporary art and art education. In addition, we provide guidance for using the art-based research strategy.

In the background of art-based research, there is a need and objective to develop research to the extent that it produces practical change as well as valid and justified knowledge and understanding related to the production of this change. There is also the need to include the tacit knowledge of stakeholders and local communities in the research process and research data, as well as utilise art-based research methods in which experience and knowledge are expressed by means of art, i.e., other than by means of verbally spoken or written language (Leavy, 2009, 2017, 2018).

The disciplines of applied visual arts and art education have been found to have the need for an art-based research strategy. These disciplines are still relatively new, and previous research has generally borrowed research methods from other disciplines, such as from educational studies and social sciences. The need for knowledge in arts and art education is transformational: the aim of research is typically to develop increasingly more functional practical working methods or practical productions. Also, the promotion of sustainable development by means of research is usually closely linked to art-based action research strategy. Researchers aim to develop operational methods that allow stakeholders and local communities, or the society in general, to become increasingly more sustainable.
Art-based action research has been developed at the University of Lapland’s Faculty of Arts, primarily in development projects, where the challenges of peripheral villages, such as population ageing, the isolation of young people, and undeveloped creative-industries and cultural services have been in the background (Hiltunen, 2009; Jokela, Hiltunen, & Härkönen, 2015a, 2015b; Jokela, Huhmarniemi, & Hiltunen, upcoming). Long term art-based action research projects are also being conducted on winter art in collaboration with cold climate engineering and tourism (Jokela, 2014) and on cultural sustainability (Härkönen, Huhmarniemi, & Jokela, 2018). The working methods of art education and community art have been applied in these projects as methods of regional development and well-being work. The projects have included place-based and community projects, which both village and school communities, as well as small and medium-sized companies have participated in. The development tasks have been defined in teamwork and with the community members. One of the starting points for art-based action research is that stakeholders and members of the community participate in the research and development process.

As the authors of this article, we have participated in the development of art-based action research in many ways. Timo Jokela has led the development work as a professor of art education in the Faculty of Art and Design (Jokela, 2008, 2009, 2012). He has been conducting long-term art-based action research for regional development. Jokela has also guided several postgraduates who have used art-based action research in their theses. Maria Huhmarniemi has carried out research on the participation of a contemporary artist in debates concerning environmental conflicts. In this research, she has observed the strategy of art-based action research, although the research has not been community-based in the same way as many other equivalent development projects. Instead, her research has involved various art-based methods for the material collection and the presentation of research results (Huhmarniemi, 2012, 2016, 2017). In addition, both authors guide students of applied arts and art education in their Master’s theses. The aim of this article is to provide practical guidelines for conducting art-based action research.

**ART-BASED ACTION RESEARCH AS QUALITATIVE RESEARCH — KNOWLEDGE FOR PRACTICAL USE**

We associate art-based action research as part of qualitative research. This is not self-explanatory as, along with artistic and art-based research, it is often considered whether this kind of research is a third research orientation alongside quantitative and qualitative research. For example, Leavy (2009) has suggested that while qualitative research is based on verbal expression, art-based research is described with images, sounds, drama, etc. According to Leavy, quantitative research aims for the freedom of values, while qualitative research is based, in principle, on values, and art-based research is political and promotes freedom. Leavy’s description is also suitable as the description of art-based action research, where it is typical for this research to be associated with social or environmental politics — more strongly than qualitative research traditionally is. Despite this, we identify art-
based action research as an orientation of qualitative research. Art-based action research is case-specific and developmental research. It follows the traditions of action research that is formed as part of qualitative research.

Pirkko Anttila (2006, 2007) defines the research approaches in research that involves development objectives. She breaks down these approaches in terms of objectivity and subjectivity, as well as by theory-orientedness and practicality. Objectivity-theoretical research aims to produce objective knowledge by means of quantitative methods. Anttila describes this approach as a positive-empirical paradigm. Subjectivity-theoretical research uses research methods that aim for interpretations, understanding, and meaning. This paradigm is interpretational and hermeneutic. Research that is based on the development of practice can respectively be specified under subjective and objective. For example, artistic research, where the artist-researchers develop and reflect on their own creative process, is subjective in practice. Anttila describes this paradigm as an interpretation-experiential paradigm. (Anttila, 2006, 2007). Art-based action researchers should determine their place in Anttila’s diagram (Figure 1).

**Figure 1.** The art-based action research diagram is based on Pirkko Anttila’s double dichotomy of research approaches (Anttila, 2007, p. 23; see also Anttila, 2006, p. 475).
Artists and art teachers are often multidisciplinary in terms of their identities and roles. Their professional skills often involve an artist’s skills, a teacher’s pedagogic skills, and the skills to develop methods by means of research. They could be described as artist-researchers or artist-researcher-teachers. However, in this article, we refer to them simply as researchers.

The researcher is always a key participant in the research process. In art-based action research, the experiences of the community or research topic are not intended to be studied from a third-party perspective. It is more the opposite in the sense that experiences are often intended to influence and be influenced as part of the research process. For example, art-based action research has been used to study the support of young people’s well-being by means of community art. In this way, the research project has provided knowledge on how community art contributes to young people’s well-being.

ROOTS IN ACTION RESEARCH, ARTISTIC RESEARCH, AND ART-BASED RESEARCH

A research strategy is a guiding principle for the implementation of research. It is the ensemble of the research's methodical approaches, which guide in the selection and use of research methods at both a theoretical and practical level. The art-based research strategy often involves the application of various methods to make it relevant. The roots of this research strategy can, however, be identified on the one hand in action research and on the other hand in artistic and art-based research. The following definitions describe the tradition of the action research strategy.

*a way of working in the field, of utilizing multiple research techniques aimed at enhancing change and generating data for scientific knowledge production. Action research rests on processes of collaborative knowledge development and action design involving local stakeholders as full partners in mutual learning processes.* (Greenwood & Levin, 2007, p. 1)

Artistic research, which is practice as research or practice-led research, and action research have many common principles and common factors, such as the aim to change and develop practice (Borgdorff, 2011). Research-based starting points are also united by the cyclical progress of the project, alternating between planning, practical action, reflection, and evaluation. Respectively, artistic research and art-based action research are practice-driven.

Art-based action research has some similarities with *a/r/tography*, a research orientation that originates from Vancouver, Canada, which has been theorised with Professor Rita Irwin’s lead. In addition to artistic research and action research, it is influenced by phenomenology, feminist theory, and contemporary art theories, particularly relational aesthetics (Irwin & Springgay, 2008; Springgay, Irwin, & Kind, 2008). The
common factor between art-based action research and a/r/tography is that practice and theoretical research run in parallel, and the research topics are situated in the middle ground of teaching, art, and communities. While phenomenology, feminist theory, and theories of contemporary art have contributed to a/r/tography (Irwin & Springgay, 2008; Springgay, Irwin, & Kind, 2008), art-based action research adheres to the working methods of environmental and communal art, project-based action, and community-based art education. Thus, inclusion, interaction, and a sense of community are emphasised in art-based action research. The autobiographism of the researcher is usually emphasised more in a/r/tography than in art-based action research (Figure 2).

The orientations of action research in art-based action research have similar characteristics to design research. Action research-based design research is a cyclical research process based on planned interventions, which aims to solve practical problems and to develop functional theory (Heikkinen, Konttinen, & Häkkinen, 2006). Art-based action research also shares similarities with the processes of service design, in
which artist-designers aim to solve the problems of communities and environments by means of communal and interactive methods (Jokela, Hiltunen, & Härkönen, 2015a, 2015b).

**CYCLICAL NATURE OF ART-BASED ACTION RESEARCH**

Art-based action research is a cyclical process of research and development. It includes the definition of objectives and research tasks, planning, theoretical background work, artistic work and similar interventions, reflective observation, conceptualisation, and the specification of objectives for the next cycle. The research process and results are documented, and this documentation is used as research material. Produced artistic work and artistic productions, as well as the participatory observation of activities, are also essential research materials.

Art-based action research usually starts with a place and a community mapping, where the researcher-artist familiarises with the operating environment and various different methods. The dimensions of the place can be defined as the physical dimensions, subjective experiences, shared narratives, and so forth. The aim of the research is identified and defined on the basis of such multi-level familiarisation of the place. An initial research plan can be drafted in interaction with the stakeholder group of the research. Thereafter, the actual research activities begin either on a practice-led basis or with a literature survey. In a literature survey, the researcher familiarises with what is previously known about the research topic, that is, how other researchers and artists have processed the topics and what knowledge they have gained in similar situations or environments. One of the literature survey’s key objectives is to identify the needs of knowledge.

In a manner typical of action research, the research questions are reoriented and further specified after each research cycle. Research may also involve side paths and missteps, which are normal in artistic work too. In artistic work, the process is partly intuitive, confusing, and based on experience and tacit knowledge. In artistic work, the objective and chosen method are usually not very clear at the beginning of the process (Jokela, 2008; Jokela, Hiltunen, & Härkönen, 2015a). Artistic research proceeds intuitively, through trial and error, and leads to unexpected results and surprising insights. The research topic and questions become clearer as the research progresses (Borgdorff, 2009, 2011). It is typical for researchers of artistic and art-based research to even end up in chaos during the research process. Artist-researchers experience a need for space and freedom in order to find their own methods. This may be due to the nature of artistic knowledge and the research questions typical of artistic research (McNiff, 2013). In art-based action research, the artist-researcher does not wander alone, but instead development work is usually carried out in some kind of team or community.
• Investigate the socio-cultural-visual situation of the place.
• Investigate what has been done in the field of applied arts in similar situations/research/activities.
• Build up the working team/focus group.

- Work with the observation data in a dialogical form for the focus group = evaluation/reflection data.
- Use interviews, group interviews and stimulated group discussions based on the reflection data and participants (user experiences).

- Make implementation of the project plan.
- Be sure everyone knows the aims and roles.
- Make the realization of the art activities.

- Observe how the planned action works.
- Collect research data and make documentation.
- Use research diaries, video and audio recordings during the key activities.

Figure 3. Art-Based Action Research cycles described by Timo Jokela.

Each cycle of art-based action research begins with planning, setting goals, and investigation of socio-cultural situations in the community or place. The next step of making action and art works can be defined as an intervention. Activities are observed and documented as the research material. Each cycle closes with reflection on and analysis of the research data (Figure 3).
COLLECTING AND ANALYSING MULTIPLE RESEARCH DATA

It is essential in art-based action research that reflective research data is compiled, which enables knowledge about the activities for development work purposes. The compilation and analysis of data is a part of the process that facilitates the development work and validates the research. Research data is compiled in many ways and is typically in several formats. Data can include, for example:

- Meeting memos and notes
- Researcher’s personal observations of the activities in which he/she is involved
- Photographic and video documentation of the activities
- Completed drafts, plans, and art pieces
- Sketches, drawings, and other planning and design material made by the researcher or other participants
- Documentation of the activities’ reflection and evaluation discussions
- Various interviews, questionnaires, and other feedback

The researcher’s personal observations should be compiled in an observation diary. The researcher can personally use any form of documentation that best suits his/her own activities. It is essential that the recording of observations is systematic and regular. For example, discussions with members of the community as well as personal thoughts and feelings can be recorded. Good formats of observation diaries include, for example:

- a notebook, which includes the documentation of observations in the form of photographs and text
- a file in which the researcher writes his/her own observations and attaches photographic documentation in support of memories
- a voice recorder, which the researcher uses to verbally record his/her observations

An observation diary also helps to recover the chronology of the research.

Photographic and video documentation are common data of art-based action research. It is typical for this material not to be compiled solely for the purpose of the research, but instead they can be used to exhibit the contemporary art process at exhibitions and, for example, as study material. Documentation is needed for knowledge purposes, exhibitions, evaluation, reporting, and the planning of new projects, and not all needs can be anticipated during the project. In the same way as the recording of observations, photography is also systematic. A camera must always be available in order to avoid missing situations in which something significant in regard to the research takes place. It is also often worth considering whether the
photographer is someone other than the researcher. If this is the case, the photographer must be familiar with the purposes of the research and discuss the purposes and needs of the photography with the researcher. Photographic material is worth reviewing during the research process to ensure that the subjects and methods of photography can be retargeted, if necessary.

In artistic and art-based work, the participants of the work can share their opinions and ideas during the stages of generating ideas, planning, and implementation, as well as through actual artistic productions. The completed drafts, plans, artistic productions, and artistic reflections of experience are often one form of research material in art-based action research. In practice, such material may refer to the participating community’s drawings, collages, photographs, videos, environmental art productions, etc. Using these sources as material unites the use of the art-based research strategy with the diverse methods of art-based research. The idea is that the participating community’s productions convey knowledge that cannot be put into words.

For example, thematic and group interviews, as well as questionnaires, can be used as part of the research, where necessary. However, it is usually worth considering whether equivalent knowledge can be obtained by means of documentation. For example, the documentation of a feedback discussion can be equivalent to a group interview. The evaluation of the process and feedback discussions can be promoted by viewing documentation, and artistic expression can also be included in providing feedback. Viewing the visual documentation of the process in interactive situations is an effective method of development work.

Material compiled in the research is always analysed in some way. If the material is comprehensive, the research can classify, theme, and group it. It is as if the research dialogues with the material and other literature. The analysis of such material does not differ from the qualitative analysis methods of material. However, it is possible in art-based research to apply artistic work to the analysis and interpretation of the material. In this case, the artist can process the photographic material into a photo collage or the voice recordings into an audio piece or an element of installation art. This type of method may also lead to the artistic representation of the research.

The analysis of material is often a process that overlaps with the evaluation of the project. It is valuable to include continuous project evaluation in art-based action research as this corrects and orientates the activities as well as the final evaluation focusing on results. The final results of the project are evaluated in two stages: as soon as the project ends and they are still fresh in one’s mind and later, when those involved have had a chance to reflect more on the experience. The project participants’ concepts, experiences, and analyses form the basis for the entire project’s evaluation. The evaluation should thus be carried out in cooperation with the participants. When activities are reviewed from the perspectives of the researcher, the participants, and the community or stakeholder groups, the review does not become too one-sided.
If the research has been completed in close cooperation with the community, the researcher should ask the community to also participate in the analysis of the material (Jokela, 2009). Furthermore, if the analysis results are presented as an artistic production, the research result may be convergent with a production completed in a communal art process. The evaluation of art productions is an essential part of forming knowledge about the functionality of a method. The completed work demonstrates how functional, successful, and empowering the process has been. The evaluation criteria of effectiveness include, for example, the work’s and research’s ability to generate ideas, feelings, and mental images, as well as a sense of empowerment and increasing participants’ confidence in their own capabilities and skills (Jokela, 2009).

PRESENTING THE RESULTS AND WRITING THE RESEARCH REPORT

The art-based action research is usually published for both the participating stakeholders or the community, the scientific community, the art world, and the general public (figure 4). A central stance in arts-based action research is that the artistic results and representation of the process is available and accessible to a

![Figure 4. Various audiences of the research include the scientific community, the art world, and the general public. Only small part of the audience familiarizes themselves with each representation of the research.](image-url)
wide and diverse audience. As Savin-Baden (2014) argues, both the audience and the participants of the research must be able to understand, engage, and relate to presentations of research.

Art-based action research is presented as both artistic productions and as research reports. If the research has been completed as an academic Master’s thesis that includes an artistic part, the research report can be more concise than a traditional research report. It is, however, typical in artistic action research that the researchers first write comprehensive reports, which they then summarise and crystallise into a final report.

An artistic production may be, for example, a place- and time-based process, work or event. It is often re-exhibited as an exhibition or video documentation. The artistic parts of the research are either evaluated on site or on the basis of documentation and representation. The artist-researcher personally determines where he/she wishes the evaluation to take place.

For the research report, we recommend the form of a traditional report because it facilitates the perception and understanding of the research methods used, the progress of the research process, and the obtained results. The form of the report can be as follows:

- Introduction, which describes the topicality, significance, and objectives of the research, as well as the aims and backgrounds in brief, and motivates the reader to continue reading
- Literature review and discussion of previous research and art in the same field
- Explanation of research strategy, methods, and ways of collecting research materials. The author has to show that he/she knows the discussions on the used methods.
- Description of the research process and experience gained in dialogue with the literature. Remember that the description is a result of the analysis of the process.
- Results, for example representation of artistic productions (results can be included in the previous chapter)
- Conclusion, including summary and the ideas for future cycles of the art-based action research

QUESTIONS CONCERNING RESEARCH ETHICS

Ethics are present in all stages of art-based research similarly than in other art-based research and action research (IDEO, 2015; Leavy, 2017; Savin-Baden, 2014; Tenk, 2002). The determination of the research’s objective, the generation of research questions, the operating methods in artistic work, and the collection of material, etc. all involve ethical choices. The aim should be for ethical perspectives and choices to be identified and worded.
Art-based research is intentional. The objective of the research is influenced by, for example, by the researcher’s and community’s values and attitudes, even their political views. These background factors should be demonstrated in a transparent manner in the research process and reports. The researcher must explain his/her relationship to the research topic and personal intentions held in regard to the research. While the community members and stakeholders participate in the research, it is important that participation is voluntary for the whole process; in other words, participants can leave the process if they want to. Research ethics from these perspectives are discussed in detail in various guidebooks (Denscombe, 2007; Wiles, 2013).

Research ethics involve the collection of appropriate consents. In the research consent application, the purpose of the research and the publication channel should be indicated, as well as whether the participants of the research are identifiable as individuals or anonymous. If children under 18 years participate in the research, consent shall be requested from their guardians. When a research is carried out in a school, consent is also requested from the principal, who may refer the request to the head of local education department.

An equivalent consent shall be requested for the documentation of the research project and the completed art productions. Only work that has been permanently placed in a public location can freely be photographed. Consent is also required for the public disclosure of production photographs and such photographs and videos in which individuals can be identified. The agreement, which is worth concluding in writing, shall describe the research project and specify the contexts in which documentation will be published and presented. When under 18-year-olds participate in the research, it is very common that they cannot be identifiable in the documentation. In this case, photography shall be limited to the extent that faces are not visible. Consent for documentation may, however, be included in the research consent, which involves the photography of an individual and the photography and representation of an individual's artwork.

Articles are often written about the research for research journals. Research may often be covered in articles several years after it has been completed. The publishers of magazines, journals, and books may require written consent from each of the individuals visible in a photograph. Therefore, such consents should be archived and stored with care.

The same ethical principles apply to the writing of a research report as to all research. Other research and art productions that have influenced one’s own research must be referenced appropriately. The challenges and errors of the research process must be disclosed in a transparent manner. The research report must be disclosed to co-researchers and key participants for them to read and confirm.
PROJECT-ORIENTED ART-BASED ACTION RESEARCH STEP BY STEP

1. PRELIMINARY WORK
   - Set the target, identify the problem, and set the initial goals.
   - Do social-cultural-visual mapping of the place and situation in which you are working.
   - Do a review of the research literature and art in the same field, which might help you to choose the ways of working. Get familiar with conventions and good practices.
   - Define a preliminary basis for the concepts and theory by using literature and research.
   - Set goals based on theoretical grounds.
   - Clarify your research methods and ways of data collection.

2. TEAM WORK: PLANNING THE ORGANISATION/COLLABORATION
   - Identify the possible project partners and their roles and functions (users, customers, focus group, and team you are working with).
   - Create a project group/research team and schedule meetings.
   - Define the group together with the operational goals/issues to be tested and developed.
   - Share your responsibilities (in parallel or hierarchical).
   - Build a common understanding of the project implementation: the value background, conception of the art, and applied art theoretical basis.

3. REALIZATION AND COLLECTING RESEARCH DATA
   - Plan the activities together with your group using the form of action research/design cycle.
   - Plan the ways to collect observation and documentation data (diaries, co-researcher/co-artist’s portfolios, interviews, questionnaires, etc.
   - Implement the artistic activities/research project and data collection.
   - Celebrate the results of your project by sharing them (exhibition openings, get-togethers, etc.).

4. REFLECTION, EVALUATION, AND REPORTING
   - Edit the observation and feedback data in a usable form as stimulation for reflection and discussion with your co-research group.
   - Classify and analyse research data gathered (often takes place using core themes and categories).
   - Evaluate the results and make suggestions for improvement to make the action better.
   - Write a report as a form of development narrative.


