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Svensson, Lennart; Ellström, Per-Erik; Brulin, Göran

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:
Rainer Hampp Verlag

Empfohlene Zitierung / Suggested Citation:
Svensson, L., Ellström, P.-E., & Brulin, G. (2007). Introduction – on interactive research. *International Journal of Action Research*, *3*(3), 233-249. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-356352

Introduction – on Interactive Research

Lennart Svensson, Per-Erik Ellström, Göran Brulin

This article is an introduction to the special issue on interactive research. A short presentation is made of the different articles. A background to the growing interest in interactive research is presented, and some differences and similarities with action research are discussed. One section deals with the issue of validity in interactive research, another with the realistic and critical perspective. The role of researcher is described. In the final section an interactive research model is presented.

Key words: Interactive research, action research, validity, researcher role, critical realism

In this introductory article we will present a background to the growing interest in interactive research. We will also discuss what an interactive research approach can look like. Interactive research is seen as a development of the action research tradition.

Interactive research is characterised by a continuous joint learning process between the researcher and the participants. The main focus is on the outcome of the research in terms of new theories and concepts. We will argue that the inclusion of the participants in the whole research process is a way to increase the validity of the research. The change process should be owned by the participants, but these changes will be more sustainable because of the critical reflection and analysis in the joint learning process.

The special issue will include five additional articles. Four articles are empirically based, one compares interactive research with gender research.

International Journal of Action Research 3(3), 233-249
ISSN 1861-1303 (print), ISSN 1861-9916 (internet), © Rainer Hampp Verlag, www.Hampp-Verlag.de

The first article by *Lennart Svensson, Jörgen Eklund, Hanne Randle, and Gunnar Aronsson* describes and discusses an interactive research approach, and illustrates this approach by presenting two examples of national change projects. The aim is to demonstrate how interactive research can be conducted in close co-operation with those concerned, within the framework of a critical and reflective community. The two cases presented serve to illustrate how an interactive research approach can support the development and dissemination of project experience, but also how the interactive approach can act as a means of generating theoretical knowledge in order to identify and understand more of the mechanisms involved in sustainable work environment and health work.

Lotta Svensson discusses how an interactive research project tries to combine closeness to the participants with critical distance. She argues that closeness to the participants can be a precondition for – not an obstacle to – a critical attitude, on the part of both the participants and the researcher. She discusses how the organisation of the research (in a local research station) can be used to solve this classical methodological dilemma between closeness and distance.

Petter Ahlström, Fredrik Nilsson, and Nils-Göran Olve describe how establishing and nurturing contact is an important and time-consuming element of interactive research. It is usually the researcher who has to establish and nurture collaboration with practitioners – a task that is not normally part of traditional research. A mutual interest in the subject of the research is a prerequisite for collaboration, but there are quite often other factors that explain why collaboration begins and endures. On the basis of the experience gained in a number of interactive research projects, the authors address the conditions required for an effective and lasting interplay between collaborating partners. Theoretical inspiration has been provided by studies of so-called imaginary organisations.

Casten von Otter presents a study of an independent research organization which is located in the north of Sweden. The focus of this study is on interaction between local public administration, businesses and universities in a Triple Helix. It is suggested that a major reason for the lack of rapport between the parties, is that researchers and entrepreneurs tend to stress different

parts of the research process. While orthodox science emphasizes verification, entrepreneurs are more interested in theoretically informed creativity and innovation, especially when they gain from saving time.

Ewa Gunnarsson discusses parallels and diversities between feminist research and interactive research. The focus is on contributions from gender and feminist research, leading to a critical qualifying process for both traditions. A challenging contribution is related to *'transcendent validity'* i.e. to produce knowledge that undermines what we already know, and transcends authoritarian limitations and existing norms. Two entrances are used to frame the discussion, *social robustness* in knowledge production, and the distinction of validity *in* and *of* science.

A background

There is a growing interest in *interactive* research in Sweden, but also in the Nordic countries. An Association (SIRA) has been organised and has worked for some years to arrange seminars and conferences. Some books have been published and others are now being prepared.

A few research stations have been organised outside the universities, based on interactive research conducted by the National Institute for Working Life[1]. About 20 dissertations have been the outcome of three research stations. One of these research stations has developed into a fast-growing R&D centre with 20 employees (see www.apel-fou.se). At the University of Linkoping, a successful research group at the Centre for Studies of Humans, Technology and Organization (CMTO) has been working for ten years, using an interactive research approach (Ellström et al. 1999).

There are various indications that interactive research is gaining greater acceptance in the research community and among funding organisations. The setting up of HELIX (in 2005) – a Centre of Excellence in Linköping with a focus on working life development – funded by the Swedish Governmental Agency for Innovation Systems (VINNOVA) for ten years, is one indication of this growing interest in interactive research. Also another call for research

[1] The National Institute for Working Life was closed down in 2007.

and innovation projects from VINNOVA, in collaboration with the Vårdal Foundation, speaks in favour of an interactive research approach. The Knowledge Foundation (the KK Foundation) has made similar pronouncements in their recent calls for projects. Nutek, the Swedish Business and Regional Development Agency, is changing the evaluation approach of the Regional Structural and Cohesion Fund from a concept of mid-term evaluation driven by regulatory imperatives, towards a demand-driven approach, on-going evaluation. On-going evaluation is in many respects related to interactive research. The advantage of on-going evaluation is that it allows for effective collaboration between the evaluator and programme managers throughout the programming period. On-going evaluation introduces a methodology involving a series of interrelated cycles of planning, action, observation and reflection. It favours a better appropriation of conclusions and recommendations.

To summarise, a dynamic development of interactive research is underway in Sweden. In this special issue, we illustrate and analyse this research tradition. The ambition is not to promote this research approach, but to discuss the possibilities and limitations connected with it.

Action research and interactive research – similarities and differences

The first question that arises concerns what we mean by interactive research.

Interactive research stresses the *joint learning* that goes on between the participants and the researchers throughout the entire research process – from the definition of the problems to the analysis and the dissemination of the results (Svensson et al. 2002; Aagaard/Svensson, 2006). An association for interactive research (SIRA; the Swedish Association for Interactive Research) has been organised (see www.ltu.se/arb/sira) to support interactive, developmental-oriented, critical and multi-disciplinary research, with a focus on the processes of change in working life. The organisation of the research should be characterised by relationships among equals and a high degree of participation. The knowledge produced should be of practical relevance and of a high scientific standard.

Interactive research can be seen as a continuation of action research in some respects, but also with a distinct idea of objectives, preferences, a different research role etc. The ambition is to take advantage of the important contributions made in the action research tradition, and to develop some elements further. Action research is an established method for supporting and evaluating efforts to introduce and implement change and to carry out research. It has proved to be a fruitful way of acquiring new knowledge in close co-operation with the participants concerned, particularly when it is a case of studying local development processes. However, there are a number of problems, difficulties and dilemmas associated with the early tradition of Scandinavian action research in working life, including the following.[2]

– the researcher acquires a strong role in the development work, which makes this vulnerable in the long term
– there is a risk that the proximity, personal involvement and values of the researcher will make it more difficult to conduct a critical analysis
– a focus on local understanding at the expense of a more general analysis
– an often low level of scientific productivity, partly as a result of the large amount of time expended and the extensive involvement in the practical research work, factors that make action research a particularly risky assignment for postgraduate students[3]
– a focus on the acquisition of practical – rather than theoretical – knowledge (Argyris et al. 1985)

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[2] The action element was strong, especially in social and health research (Levin 2006). Later on many local and regional R&D centres were established with a focus on applied research (Tydén 2006). The Dialogue Conferences were often used as a method for change in action research in an innovative way. The latest versions of the Dialogue Conferences were more focused on the practical and context bounded knowledge production (Drewes Nielsen 2006).

[3] Herr/Anderson (2005: 10) feel that action researchers are more interested in their development projects than in writing about them.

– the demand for a high level and – often unreasonably – wide range of expertise on the part of the researcher so that he or she can deal with conflicting demands and differences of interest

– the lack of acceptance and legitimacy in the traditional academic scientific community.

To overcome some of these difficulties with this kind of action research, the interactive research approach focuses less on the researcher's role in, and responsibility for, the development work, but more on the joint learning process with the participants and the theoretical outcome of this joint learning. The aim is to conduct a theoretically-related analysis that can contribute to long-term theoretical development, but that is also practically relevant to the participants.

The ambition in interactive research is to conduct research *with* the participants during the entire research process – from the definition of the problem to the dissemination of results. It is a question of seeing the participants as being capable of, and interested in, creating a deeper understanding and analysis of whatever is being studied. The creation of trust, mutual relations and an open and liberal climate are important preconditions for interactive research. However, it is also a question of daring to recognise conflicts of interest, and demanding the right of the researcher to critically examine and use the material, while at the same time the researcher must also be prepared to be critically examined.

Interactive research – like action research – does not represent a particular method; it is more a question of an *approach* that can comprise several different methods – interviews, focus groups, questionnaires (which are used in the joint analysis), dialogue and analysis seminars, participatory experience, self-evaluation and so on.

The ambition to develop equitable and mutual relationships, between and with the participants, is common for both action and interactive research. This ambition is strongly pronounced in Participatory Action Research (Fals Borda 2001; Whyte 1993), in Participatory Research (Park 2001), in Co-generative Action Research (Greenwood/Levin 1998), in Action Science (Friedman 2001; Argyris et al. 1985), and Co-operative Inquiry (Heron/

Reason 2001). However, in action research these relations are based primarily on the researchers contributing to practical development and to a lesser degree on the participants contributing to the theoretical work.

Interactive research is similar to gender research in certain respects, and is also influenced by it. The critical ambition, the interactive role of the researcher, the ambition to create equal relationships with the participants, the use of different methods, the switches between closeness and distance – all are similarities between these two traditions (Gunnarsson 2006). Of course, gender research has different traditions, which are similar to both action and interactive research. The article in this issue will present a version of gender research that has strong similarities with the interactive approach.

In the following section we address the issue of validity, a critical orientation, and the researcher role. We end this chapter by presenting a model of interactive research.

The issue of validity

Research that has an ambition to be developmentally oriented, or to be close to the objects of the study, is often criticized for having a low level of validity. We acknowledge that this risk exists in the case of change-oriented research and the close involvement of the researcher, but we do not accept this as an inevitable conclusion. On the contrary, we think that close interaction can increase the validity of the research! But, of course, this depends on a lot of factors – the organisation of the research, time limits, the competence of the researcher, the possibility for critical reflection, the readiness for change and learning among the participants (including the researcher), the funding of the research, the academic support, etc.

We believe – as does Eikeland (2006) – that action research and interactive research cannot ignore traditional validity requirements. Interactive and action research can, on the contrary, increase validity and thus contribute to the development of academic, objective research. It is no longer the case that validity is tested within the walls of academia alone, but in a dialogue with the participants and society at large. Some researchers (Gibbons et al. 1994; cf. Eikeland 2006; Gunnarsson 2006) claim that this increases validity and

provides more *robust* knowledge. The risk of turning the participants into research objects can also be highlighted in a discussion of the validity of the knowledge produced.

A realistic and critical perspective

There is no science, but of that which is hidden. Bachelard

Interactive research is based on a critical-realistic foundation (Svensson et al. 2002). This means that it starts out from what is actually happening – not from what appears to be happening, or what our initially limited understanding leads us to believe is happening. In critical-realistic theory, rules, power, resources etc. set important limits to action, but they also represent opportunities for influencing organisations and institutions. Sustainable development cannot be based on discourse, rhetoric, and project plans within the framework of a post-modernistic, relativistic approach. It must be based on real – material and social, but also individual – changes.

The critical ethos is strongly pronounced in interactive research. This entails a broader value base compared to, for example, the organisational development (OD) and management tradition in which the management prerogatives are taken for granted. Interactive research discusses how a balance between different interests can be achieved – between the individual, the organisation and society; between the employees and the employers; between men and women. The discussion of sustainability – where human resources are conserved not wasted – can be a useful platform in finding an ethical base for an interactive research project.

Acknowledging that individuals, groups and organisations have different interests is a great challenge in interactive research. Will the participants not defend their own positions and interests if they are to take part in a joint learning process? Can interactive research really be critical in such a situation? Will the outcome of the research not just repeat accepted common sense, with all its superficial knowledge and rationalisations to protect different self-interests? Carrying out research together with the participants seems to be in contradiction to the ethos of independent, critical research.

We think that these obstacles must be carefully addressed if interactive research is to become accepted in the academic community. The conditions for carrying out interactive research must be assessed in advance. In most situations, an interactive research approach is not realistic or appropriate. In interactive research it is a case of conducting research *with* – not *on* – the participants. This entails an open and critical search for knowledge in the form of joint knowledge acquisition governed by curiosity and an eagerness to learn. The preconditions for joint knowledge acquisition have to exist, or be created – in the form of the participants' interest, time, resources, support from the funding organisations, involvement from managers etc. These objective conditions for carrying out interactive research must be clarified from the very beginning of an R&D project. In many of today's downsized and heavily rationalized organisations these conditions are absent, and interactive research is not an option, especially not for doctoral students.

We will address the discussion of the critical role of science with reference to Bourdieu. He stressed the necessity of a "rupture" with common sense, because 'the truth of experience is inaccessible to the experience itself' (Bourdieu/Wacquant 1992: 235, 247, 250). Social science by necessity presupposes a stage of *objectification* because of the constraints and limitations of practice. Bourdieu is afraid that scientific reason will be contaminated by practical reason (Bourdieu 1990: 11, 27). To practice a radical doubt is akin to becoming an outlaw (Bourdieu/Wacquant 1992: 241).

Bourdieu's critique of the superficiality of common sense seems to be incompatible with our idea of interactive research, which is based on a joint learning process and a close relationship between the researcher and the participants. We do not accept this conclusion based on Bourdieu's argument, despite agreeing that common sense is often unreflective, contradictory and incorrect. Whether interactive research can be critical or not depends on the degree of reflexivity in this learning process, that is the scope and solidity of the scientific knowledge produced. The outcome of this joint learning process must be different and more critical compared to the starting point. The joint learning process can start with the participants' own understanding and primary experiences (Bourdieu/Wacquant 1992: 126), but it must not stop there. Interactive research must go beyond unreflective thinking in order to

find explanations that exceed everyday understanding. *Understanding* and *explanation* can thus complement each other (Riceur 2003).

An interactive researcher should encourage and support the participants to critically examine their own understanding. This should be a common effort, which also includes the researchers' own concepts and theoretical models. Reflection is – according to Bourdieu – not an individual or retrospective process, but a social effort made in a practical and proactive situation (Bourdieu/Wacquant 1992: 40). We think that the learning between the researcher and the participants – under favourable conditions – can support a reflexivity that increases the validity of the research. The new insights gained by the participants can lead to a more sustainable change process.

To understand the preconditions for this joint learning process the epistemological and ontological basis for our research must be clarified. The starting points are pragmatism and critical realism. Pragmatism basically opposes all forms of dualism, especially dualism between different forms of knowledge. Pragmatism decrees that knowledge lies in *action* (experience), not in any underlying theories. It is thus the action taken – and the benefits and consequences of this action – that forms the basis for pragmatism. The meaning of a statement only becomes apparent in the context of its enactment. In order to really understand an idea, we must first see how it works *in practice*. The best way to understand a phenomenon is to *change* it (Peirce 1957; James 1981; Dewey 1989). Theory is a necessary and integrated part of practice, but it does not acquire the same dominant or independent role that it does in rational conceptual systems. Formal theory is not allowed to take the upper hand, but is rather seen as something temporary – something that is developed in the course of a critical examination (compare Popper 1959). Nor do researchers have the sole right to the truth, or a monopoly on theories and methods that it is assumed will enhance our knowledge. Practice is the starting point, but theory is needed to release experience and as an instrument that may possibly be used to change this experience.

Critical realism (Bashkar 1978) provides another theoretical starting point. Critical realism seeks to explain fundamental conditions (mechanisms, patterns, structures, systems of rules and regulations in society). In this way, research can explain the conditions governing human actions – which condi-

tions are temporary and which are fundamental – and thus identify the scope that exists for change. Critical realism rejects various post-modern theories that claim that true knowledge cannot be acquired, and that everything is relative, contextual and temporary. Critical realism emphasises that there are strong mechanisms in society that affect the players – e.g. in terms of gender and class – irrespective of whether they are aware of them or not. The task of research is to reveal these *mechanisms*, a difficult task that neither empirical (positivistic) nor understanding-oriented (hermeneutic) research can manage.

We believe that critical realism constitutes an important and necessary complement to pragmatism, which is based on the action taken and the participant's own understanding of, as well as the benefits of, this action. Pragmatism thus provides a good starting point for the joint acquisition of knowledge in equitable forms with researchers, but it also entails a number of limitations due to its focus on immediate, short-term and instrumental factors. Critical realism is a necessary element, if the research concerned aims to discover, question, extend perspectives and create knowledge of a general nature.

We discussed Bourdieu's argument relating to common sense, which he sees as an obstacle to interactive research, but our counter argument is that involving the participants (under favourable conditions) can reinforce a critical research approach. We can also find support for an interactive research approach in Bourdieu's theory. We accept his critical standpoint, which is based on a realistic and pragmatic foundation. Theories must be based in a concrete research practice. Reality can be difficult to get at, and it must therefore be investigated and "revealed". This means an ambition to see what lies "below the surface"– what is temporary and what is of a more lasting nature (Bourdieu 2003).

The role of the researcher

Interactive research requires a lot of hard work and presupposes that the researchers and participants are prepared to play an active part and invest time and resources in the research process. It demands a broad range of knowledge on the part of the researchers and is more work-intensive for both

the researchers and the participants – in terms of data collection, dialogue, meetings, feedback etc. – compared to traditional academic research.

In an interactive research approach, the participants need to be involved and committed throughout the whole research process. This can be achieved by means of active participation in seminars that require preparation, collaboration at the organisational level, the completion of questionnaires, verbal and e-mail communication and the contribution of critical comments on the documentation produced.

The role of the interactive researcher is more complex than that of the researcher in most traditional academic research. An interactive researcher must – apart from having theoretical expertise and methodological know-how – above all be able to *co-operate* with the participants. This co-operation takes place in different environments and at different levels and the preconditions shift and vary from case to case. It is a question of being able to handle the different *dilemmas* that arise in learning and development processes, including the following:

– being able to create closeness, but still being able to keep a distance
– listening to and understanding the local perspective, but at the same time seeking generally-applicable knowledge[4]
– understanding the value of practice, without this being at the expense of theory
– inspiring confidence and creating trust, but still daring to be critical despite the fact that the result may have a negative impact on those concerned (above all project managers, those responsible for projects/programmes and other managers)
– thinking strategically on the basis of research interests, but still being able to take ethical considerations into account
– being a part of a development process, but not becoming a prisoner to it

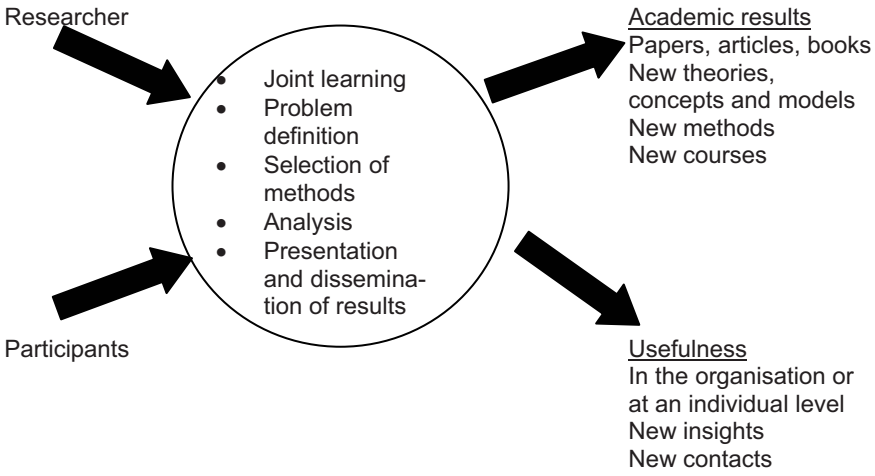
[4] Collins (1998) speaks about the action researcher as "the outsider from within" (cf. Eikeland 2006).

– having clear values and daring to take a stand, but still being ready to question and change one's own point of view
– being able to adopt a local and limited perspective, but still being able to link this to a holistic understanding and a structural analysis
– having good knowledge of one's own discipline, but at the same striving for interdisciplinary understanding.

An interactive research model

In Figure 1 we have tried to illustrate an interactive research model.[5] It is based on process thinking and the recognition of a difference of interest between the researcher and participants.

Figure 1: An illustration of an interactive research process with different roles and interests



[5] In the following article (Svensson et al.) a similar model of interactive research is presented.

The researcher and the participants enter the research process with different experiences, interests, time schedules, status, anticipations etc. These differences must be carefully analysed before the research is initiated, and an agreement can be made in which the roles, anticipations and obligations are clarified.

When this groundwork is successfully completed the interactive research can focus on its essence, that is the joint analysis organised as a (critical and reflective) learning process (see Figure 1). In this learning process, there is a close cooperation between the researchers and the participants, which is based on a common and genuine curiosity to go "beneath the surface" and to find the mechanisms behind the phenomena that is studied.

In a joint learning process, the researchers are interested in studying what the participants do and what their capabilities are, what questions they ask, what investigative methods they use, how they draw conclusions, what rationalities they apply, how they learn from mistakes, what enables them to transcend the boundaries of common sense and, above all, how the local perspective can be developed with the help of theory and analysis.

The aim of joint learning is to create a reflective community (*a collaborative inquiry*; compare Schön 1983; Argyris et. al. 1985) in which researchers and participants investigate, or conduct an inquiry into, problematic situations. In the inquiry, thought and action are intertwined. Both parties are seeking explanations and understanding. They want to test and examine different assumptions regarding cause and effect, identify links between different areas or factors and see how the parts form a whole. The aim is to make discoveries, to generate new knowledge that is of theoretical interest but also useful in practice.

In interactive research, control is shared between the researchers and the participants. It is important to openly discuss the interests, attitudes, expectations and so on of both the researchers and the participants. At the same time, the collaboration between them is based on them having different roles, methods, abilities, expertise and, to a certain extent, different systems (see below). The differences should be clarified to avoid the researcher becoming "one of the gang", which would make it difficult to maintain a critical dis-

tance. The communication between researchers and participants can be based on theories, models, examples and analogies.

In the third phase of the research process (see Figure 1) there is a new separation between the researcher and the participants. The outcome of the research will be different for them. The researcher is interested in producing new theories that can be published in books, articles and papers. The participants gain a deeper insight that can be used in organising a change process that will be more sustainable because of the critical analysis resulting from the joint learning process.

Figure 1 is an ideal-typical model for role taking in interactive research. To what extent it has been practiced will become clear in the following articles of this issue.

The articles in this special issue will illustrate the problems, possibilities, and dilemmas with interactive research presented above. The articles will give different answers to these dilemmas dependent on the situation, the research issue, the methods used, the discipline, the research environment etc. But we think they have something in common, namely an interest to produce research of a high quality in close cooperation with the participants. There is also an action component in most of the articles, but the researcher is not considered to be the owner of or the "driver" for these changes.

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About the authors

Goran Brulin is a professor in work organisation and regional development. He has conducted research in Swedish auto industries and industrial relations. He has also carried out research on local and regional development processes. Recently he has begun to organize the ongoing evaluation and interactive research of eight programmes of the Regional Structural and Cohesion Fund.
E-mail: goran.brulin@nutek.se.

Per-Erik Ellström is a Professor of Education at Linköping University, Sweden. He is also Director of the HELIX Excellence Centre for research on mobility and workplace innovation at the same university. His research interests include studies of learning and development processes in groups and organizations, leadership, the interplay between informal and formal workplace learning, and interactive research.
E-mail: perel@ibv.liu.se.

Lennart Svensson is a professor in sociology at Linköping University and a research leader at HELIX Vinn Excellence Centre. His research has focused on organisational and regional change, team work, organisational learning, project work, networks, union work, action and interactive research.
E-mail: lennart**.**svensson@liu.se.