

Action and Interactive Research – a Nordic approach.
A textbook.

A draft for a book and a preliminary version of a first chapter

Do not quote or disseminate this draft.

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Preface.

For many years, action research has been dominated by intellectuals with a critical attitude towards the traditional academic curricula. In the Nordic countries, some of the most famous action research projects were initiated by researchers involved in research institutions outside the sphere of universities. Only at business and technical schools has action research been practised as part of the curriculum.

The large number of books on action research which have been published since the early 1990`s only a small number of volumes that are relevant for systematic academic training of students at universities and business schools. Hillery Bradbury and Peter Reason`s "Handbook of Action research" (2000) and Morten Levin`s "Introduction to Actions research" (2001) are two of the few examples of texts, which try to present action research in an overall perspective. However, neither of these books is written for students who need a pluralistic introduction to different traditions that they are not familiar with. Nor are these books written as a presentation of action research as part of competence development in which action research exists on equal terms with other forms of research. This book tries to make up for these limitations in books about action research.

International discussion in the theory of science and theory of knowledge comes close to the position of action research. The so-called "New production of Knowledge", introduced by Gibbons and Nowotny, has opened up the possibility to discuss new types of connections between research and contextual problem solving. In Sweden, Göran Brulin`s book "Den tredje uppgiften" (see also Brulin`s article in Concepts and Transformation) made a strong argument for putting action research on the agenda of the regional universities. In the book "Interaktiv forskning – för utveckling av teori och praktik" (2002) Svensson, Brulin, Ellström and Widegren tried to stress the importance of making action research a co-operative part of the academic world by introducing the concept of "*Interactive research*". The shift from action research to interactive research signalises that action research is not just to be considered an alternative to empirical analytical (social) science, but that it should be understood as a complementary activity.

This book represents a new discussion in the tradition of action research – a discussion we do not want to close in this book. But we insist that action research or interactive research today is an organic part of societal knowledge creation, and that it should no longer be seen as a sect or an exclusive belief system among some isolated researchers.

This book is about action research. It is written with the same readers in mind as many other recent books in the field. Nevertheless, we try to be systematic in a way that makes the book especially useful for students who want to learn about action research. We think that one cannot be a good action researcher unless one gets involved in practical training and make your own experience. Today, many students do not have the possibility to undertake action research because they do not know enough about the conditions for this kind of action research – in terms of the theory of knowledge, epistemology, the methods used, the working conditions, time pressures, ethical considerations, career prospects, the prestige attributed to this research in the academic community, and so forth.

In this book, we present an approach to action research or interactive research, which is pluralistic in two ways:

- a) It is pluralistic in that we will not present one single school of action research. Instead, we will present different branches of action research based on a dialogue among the authors of the various chapters.
- b) It is also pluralistic in that we will present confrontations between academic research and action research – both in a theoretical and methodological sense. But we will also present examples of co-operation between action research and other research traditions. We think that the students in the academic world will benefit from some of the epistemological discussion which action research has catalysed during its 50 years of existence. On the other hand, action researchers can learn a lot from the progress made by the academic society in theoretical and methodological matters.

However, our pluralism has some restrictions. We will neither avoid epistemological conflicts, nor transform the divergent traditions of science into ‘anything goes’ or ‘everything is of equal value’. On the contrary! We believe that the tension between different forms of action research and different conceptions of academic research is important. Because of the conflicting perspectives, a dialogue between them about theories of science, different methods, and about practical, social and politic issues could be fruitful. With a dialogue, which is based on these divergent perspectives, we can clarify the normative impact of different research traditions. We can also see when the different epistemological approaches can become complementary, and when they should compete with each other.

Academic research is defined here as research in which the researcher understands himself to be in a privileged position together with other scientists in the construction of their theories and methods. They might be positivists, hermeneutic phenomenologists or even constructivist relativists. But, unlike action researchers, they understand themselves as having a privileged role in the development of knowledge, which is seen as of quite a different kind and at a higher level compared to ordinary, practical oriented, every day experience. Action researchers see themselves as co-producers in the creation of new knowledge, but they do not see themselves as being in a privileged position in this joint learning process. On the contrary, action researchers can only create knowledge in co-operation with the social actors based on trust and a free agreement to participate. But at the same time, the researchers must possess and be respected for her/his professional competence in handling data, in constructing theories, in organising a learning process, in relating the results to existing research, in ethical matters, and so on.

The rapid development of action research has contributed to an open and dialogical atmosphere between researchers and practitioners in different fields of research. Still, most of the academic researchers have not left ‘their ivory towers’. For many academic colleagues the ivory tower represents a kind of retreat – for criticism, reflection, theoretical development, systematic thinking, open dialogue with colleagues etc. Two hundred years ago Humboldt argued for the necessity of an independent academic society. We think his argument is needed once again in order to protect science from a submission to the interests of business or other powerful groups in society. Today, we face a situation where action research could be linked to critical thinking in the universities – co-operation that would benefit both. (See J.F. Lauridsen and Aagaard Nielsen’s article in Svensson et al 2002.) In order to stress this ‘bridging’ role of action research, we occasionally use the concept *interactive research*. We want to underline the necessity of an academic independence for action research too, something, which is becoming more urgent because of the strong economic interests related to ‘the new production of knowledge’.

Not all contributions to this book will follow the above-mentioned approach; nor will they agree to our perspective on action/interactive research. We have tried to choose authors expressing a diversity of understandings of action research in the Nordic countries.

In Sweden and Denmark, attempts have been made to create networks for such a pluralistic discussion of action research. We see these networks as an expression of a pluralistic spirit and an interest in learning more about action research and its potential for the future. These networks will be a way to create connections to a lot of people who are interested in action research, but who, as a minority group in the scientific community, are scattered and without knowledge of each other (see www.aktionsforskning.net and www.arbetslivsinstitutet.se).

Lennart Svensson and Kurt Aagaard Nielsen

I. Introduction and background

Action research has a long tradition in the Nordic countries. It was introduced in the beginning of the 60's in Norway and has become established as part of the growing R&D work in all the Nordic countries, both inside and outside the universities.

With this textbook we want to describe this development, discuss some important issues, and give some examples of the different methods used. It is an anthology, and in order to provide an overview over a divided field, we have tried to prioritise comprehensiveness and the interrelationships between the different chapters. The focus is on action research/interactive research in working life in a broad sense, which includes professional institutions, local and regional development, R&D-activities in the companies.

The first question, which arises, concerns what we mean by *action* research and *interactive* research. Action research is not seen as a collection of principles with distinct theories and methods, but more as a perspective on how to conduct research. However, there must, of course, be an *action* component, that is, the research should support a normative *change* in one way or another (in problem solving, developmental work, restructuring etc.) while, at the same time producing new knowledge. The Danish network for action research's home page provides the following introduction):

“Action research is understood as a scientific method for making research. It underlines the connection between understanding and change, between theory and practice, and active co-operation between researchers and the participants in the production of new knowledge.” (www.aktionsforskning.net)

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). An association for interactive research (SIRA, the Swedish Association for Interactive Research) has been organised (see www.arbetslivsinstitutet.se - forskning - samverkan). The ambition with SIRA is to support interactive, developmental-oriented, critical and multi-disciplinary research, with a focus on the change processes in working life. The organisation of the research should be characterised by equal relationships and a high degree of participation. The knowledge produced should be of practical relevance and of high scientific standard.

The normative aspect of the interactive/action research activities is also without a well-defined meaning or definition. In some parts of the tradition, the normative elements in programmes are questions of equality, in others – for example the original experiments carried by Kurt Lewin – they were a question of giving people greater competence and responsibility. In research programmes close to management participation as such is the main normative orientation. Democratic processes are, however, a utopian orientation for many action researchers. Two of the current epistemological discussions in the tradition concern the normative aspect of research and the meaning of democracy in research design.

We will use the terms action and interaction research in this book without defining them further or clarifying the resemblance with other similar concepts. Instead, we have provided a short description of the different action research traditions in Appendix 1.

This textbook is mainly directed at university student, but it could also be used by researchers and by those actively involved in action research. It could be used both in teaching at the universities and among the practitioners who are interested in, preparing for, or taking part in action research. We want to offer graduate and doctoral students an insight into action research and help them take a stand for their own future whether they would like to engage themselves in this research tradition or not. We have asked postgraduate students what they want to know more about in order to be able to make a decision about their future. They have stressed the following issues:

- whether this field of research will be growing or diminishing in the near future;
- what kind of prestige it will have in the scientific society;
- what career opportunities there will be in a short and long term perspective;
- how action research is organised, and where it will be carried out – at the universities, in companies or in different types of R&D centres;
- which the foundations for action research are in terms of theory of knowledge and theory of science;
- what kind of methods are used, and if these methods are accepted by the scientific community;
- if the ambition to carry out R&D work will be an extra burden for the researcher and the consequences for her/his academic career;
- to what extent action research so far has been productive and of a high quality (when measured by traditional academic standards);
- what kind of professional competencies will be needed to carry out action research, and how this competence can be acquired.
- Whether action research can be relevant for activities in social movements like ATTACK, unions, the women's movement etc.

We think that action research can be a way to improve the conditions for doctoral students by making the training more relevant, challenging, interesting and useful for their future. Doctoral students can take part in a research that combines practical usefulness with theoretical insight – closeness with detachment (Hansson 2003). Their position in the labour market will be stronger and new options will be available when they have to compete on the labour market.

The existing situation for doctoral students, where they are isolated from the surrounding society, is strongly criticised in a recent survey, which was distributed to doctoral students in Sweden (in total 2 200). Not a single one (!) of the 1 200 students who took part in the survey had any kind of practice or meetings with companies, organisations or authorities during their university education (Högskolevärlden, no 3–4, 2003).

An evaluation of an action-oriented research programme was made at the same time, which was financed by the KK-foundation (see www.kks.se). This is a comprehensive program for collaborative research, which is partly financed by industry. The doctoral students are working part time in industry during their training (see Adler et. al. 2004). The research students in this programme were much more positive, especially concerning their contact with working life. About 85 percent were 'very' or 'rather' satisfied with the program. The combination of theory with practice was also highly valued (KK-report 2003:64).

However, of course, action research has its own problems and the working conditions for the students could be much better. One problem is the extremely low academic productivity in

terms of scientific articles. This was the main criticism of action research in an evaluation of (parts of) the Norwegian action research made by Åge Bötger Sørensen (1992). He made an effort to de-legitimise action research by using the argument that the researchers were almost outside the academic world, which was defined as international refereed journals. As pointed out by Olav Eikeland (1992), Sørensen's arguments were formalistic and did not reflect the epistemological nature of action research. However, the critique expressed an evident problem of legitimation in the tradition. The problems can be explained as an effect of time-pressure that is a result of the double burden of producing change and theoretical knowledge at the same time. Action research is a complex and time-consuming activity. The low productivity can also be an effect of negative attitudes against action research among editors of scientific journals. Even though things have changed much since Åge Bötger Sørensen made his hostile attack on action research, the impression remains that action researchers have difficulties in measuring their productivity by conventional academic standards.

Other weaknesses, or maybe they are a part of the productivity problem, are a lack of theoretical integration and an awareness of the research in the field, which can be an outcome of a minority problem in academic settings (Gustavsen 1996:9). The action researchers in different research programmes often have been dispersed in different universities without sufficient support and training in their research roles.

The writing of the book can be seen as a learning process in which the participants obtain a deeper understanding of complex research issues. The questions presented above, together with the authors' own interests, can be summarised in the following dilemmas and reflections concerning action research (compare Svensson et.al. 2002):

- 1) How can *theory* and *practice* be integrated in action research? What do these concepts stand for? What is the relationship between them? Will a focus on the practical usefulness of action research lead to a neglect of theoretical knowledge?
- 2) Should an ambition of action research to produce *generalised knowledge*? From such a generalised perspective, how useful is knowledge that is produced for local users and which is based on a practical application? If the participants have a strong impact on the organisation of the research process, will that not jeopardise the striving for general knowledge? Or can the impact become a challenge to general theoretical constructions on structural reforms in society.
- 3) Can action research, with its interactive and ambitious and trustful relationships, at the same time be *critical*? Can the researcher take a critical stand against something she/he has been part of, and has sometimes, been paid for doing? Will a conflicting paradigm, therefore, be ruled out in action research?
- 4) How should action research be *organised*, and where should it be carried out? Will the demand based Mode II research take over and dominate the university based Mode I? (See Gibbons et.al. 1994; Nowotny et.al. 2001). What consequences will the development of different R&D centres have for the organisation of action research? Will they be an alternative or a complement to the university based research?

With this book, we want to illustrate what action research *could* be like, not what it should be. The ambition is to present a plurality of approaches and show the variations in this growing

field of research. The idea is not to promote a best way of making action research, but instead to reflect on and analyse the different approaches used.

The ambition is to have at least two important questions of power in research reflected in all chapters: the gender perspective and the question of financial domination. Gender differences can be seen as power-relationships in the research organisation; in the selection and conceptualisation of research problems and the methods used; whether the career opportunities and working conditions will be the same for women and men, etc. Traditional academic research has been criticised for excluding alternative views and perspectives by making false generalisations, mystifying concepts and circular reasoning. The male-dominated and hierarchical way of producing 'objective' knowledge is seen as a closed system, which excludes different social groups (Minnich 1990). What can be said about action research from this exclusion perspective? Does it include new groups in knowledge production? Is action research more equal and democratic in this sense, compared to traditional academic research?

Financial domination in research is even more precarious in action research. When one is undertaking research in direct co-operation with actors, one easily reproduces the financial power structure in the research design and in generating interesting research questions. How can action researchers find ways to insist in projects and project design, which are different from the partners investing money, time and economic risk and in projects? Can action researchers benefit from protection in traditional "basic" research in universities, or is the solution that action researchers have to find financial sources from, for example, NGOs to modify the economic power structure in the field of research?

We hope that this book will be useful in that the authors reflect upon these dilemmas, and that it will help action researchers in their future work. Even if we do not give any definitive answers to these issues, we will hopefully get a deeper understanding of the dilemmas presented.

The content of the book

In the first part of the book, which is written by the editors, we give a brief presentation of the historical development of different action research traditions and questions in the Nordic countries. This should be useful for the reader who needs an introduction to and overview of some of the questions and dilemmas facing action research in the Nordic countries.

The six chapters which form the second part of the book discusses important issues that are implicit in action research namely the theory of knowledge, different methods, values and norms, the role of research, the organisation of R&D work and its relationship to the universities, questions of validity and the possibilities for generalising the results. In this part of the book, the reader will see a plurality of conceptions that sometimes will contrast the perspective on action research that we have presented in chapter one.

The third part of the book presents some examples of methods used in action research. A special focus is on the learning and socialisation of doctoral students. How do they learn to be competent action researchers today, and what changes will be needed in the future? The contributions to this part in the book come mainly from papers delivered at the SIRA

conference in Stockholm in 2004.¹ We tried to choose papers from doctoral students based on their experience of undertaking action research.

The final part is a summary of the book. Some conclusion will be drawn based on the analysis made. We will also discuss how action research can be developed in the future.

¹ It was the SIRA-conference in Stockholm in May 2004 (se www.sira.se).

II Action research and interactive research – trends and development.

In this part of the book, we will provide an overview of the development of action research in the Nordic countries. We cannot give a detailed picture or a longitudinal description. Nor can we illustrate the different developments in the Nordic countries. Instead, we want to focus on some important aspects of the general development, which has taken place in all the Nordic countries. It is, in other words, a kind of mainstream presentation, but given a critical reading and interpretation. (What is presented now is just a preliminary draft, which will be rewritten on the basis of the text in the chapters to come. New facts will be added and the analysis will be more careful in the next version.)

We start with an introductory section based on ‘the production of new knowledge’ – Mode II. This presentation will be used as a framework for understanding the development of action research in the Nordic countries. We use the distinction between Mode I and II in trying to understand the development of action research in the Nordic countries?

A ‘new production of knowledge’

A ‘new production of knowledge’ is developing quickly in the Nordic countries and elsewhere, quite in line with the prediction made by Gibbons and Nowotny (1994). This interest is demand based and comes from companies, governments, municipalities, regions, organisations, consultants, and journalists in the highly industrialised countries.

What does ‘the new production of knowledge’ mean; where and how is it organised? The growing interest in research is not primarily directed at the universities. Something new is requested – a problem based approach, a multi-disciplinary perspective with interactive methods, which give the participants an influence over the research process. The orientation towards a problem-based research is not totally new. In university reforms from the 1960`s and 70`s the same arguments were used – recommended by OECD – as pragmatic reason behind new university concepts. In Denmark, the two new universities of Aalborg and Roskilde and in Norway the University of Tromsøe were more or less following the ideas, and they took important steps towards a problem-oriented organisation of research and didactics. The new reform universities played a role in spreading action research as an epistemological scientific approach among academics in the Nordic countries. However, the initial reforms were disturbed by anxious academics and politicians who saw an uncontrolled radicalisation connected to the student movement, and for a while the process towards problem-oriented and participatory research methods were stopped at the universities. They continued however in R&D institutions in Norway and Sweden.

Gibbons et al. al (1994) and Nowotny et al. al. (2001) talk about an expansion of a Mode II way of making research (see figure 1). We will briefly present some elements of Mode II, compared to a more traditional academic research – Mode I.

<i>Different research models</i>	Mode I	Mode II
Steering mechanism	The academic discipline	Problem based, multi disciplinary
Authorisation	Professional rules	Scientific and societal rules
Objectives	New theories	Usefulness
Type of knowledge	General	Specific
Time perspective	Long term	Short term
Responsibility	The scientific community	A societal responsibility
Actors	Researchers	Participants and researchers
Relationships	Hierarchical	Equal
Work forms	Planned, predetermined	Flexible, interactive
Approach	Closed	Open
Physical proximity	Distant	Close
Actors	Universities	R&D centres, institutes, companies, regional universities
Relations	Object relations	Subject relations
Strategy	First discovery – then Application	Simultaneous discovery and application

Table 1. *Mode I and Mode II – two different models for making research* (see Gibbons et.al. 1994; Nowotny et. al 2001; compare Svensson et. al. 2002:5).

Mode II research focuses primarily on being useful for the participants. It is organised in an interactive way with equal, close, informal and open relations between the participants and the researchers. The work forms are flexible, dynamic and effective, and are often supported by the new information and computer technology (ICT). The research is multi-disciplinary, focusing on a contextual understanding, and using interactive research methods. The validation of the research results is broader, encompassing different actors. In this way, the quality control of the research process will be broader and more varied compared to a traditional academic research. A more ‘robust knowledge’ is created. The traditional sequential distinction between discovering, application and evaluation will not function in a rapidly changing society. Because of the intensity of the processes of change, Mode II is based on a simultaneous process of learning and change.

In figure 1 we have also illustrated the traditional way of organising research – Mode I. This research is often referred to as ‘High Science’ and focuses on universal theories, which are stated in terms of abstract concepts (Toulmin 1996:19). This research is based on the scientific discipline with professional rules on how to make research. The relationships are

hierarchical, both inside and outside the system. Academic research is to a large extent 'closed' for people from 'the outside'. The researchers decide themselves about the content of the research and the methods used. The quality of the research produced is solely based on peer-evaluations. The objective is to search for general knowledge in a long-term perspective, which will add to the existing stock of knowledge.

What are the driving forces behind the expansion of Mode II? Nowotny et.al. (2001) point to fundamental changes in the society with an increased importance of knowledge in the economy. Research is an important productive force in the new knowledge based or, in Castells' (2001) terms, *informational* society.

The growing interest for Mode II is thus an effect of a new perspective on change and innovation. The transformation of the society is speeding up, and the changes become more difficult to foresee because of an increasing complexity. A linear and mechanistic model for change is being replaced by a learning and interactive strategy (Svensson & von Otter 2001). In such an unforeseeable process, research can be useful for handling insecurity and in assessing the risks with investments, but also helpful in organising change and innovation.

The pressure for a new production of knowledge comes from external actors – companies, municipalities, counties, different intermediaries etc. The need for expertise and professional knowledge is growing in an increasing number of new fields – such as marketing, innovation, learning, technical development, work-organisation, etc. However, such knowledge cannot be 'bought from a shelf'. Instead, the users themselves must be co-producers if the new knowledge should be useful in their situation. The enterprises say they have to be proactive to be 'one step ahead' in understanding the demand from the market and in finding new possibilities for innovation. The situation is similar for municipalities, counties, the state and other organisations and institutions. What is really meant by the necessity of being proactive or in constant change is of course not easy to understand. Why does the market express itself in that language? At least you can criticise the new need of increasing dynamism for being fetishism or a reified global matter, which does not necessarily correspond with human needs (Olsèn, Nielsen and Nielsen 2003). Nevertheless, never the less, the new demands work as an unavoidable imperative.

This new learning strategy for change and innovation will have fundamental consequences for the way research is organised. It can no longer be planned by the research community, but must be improvised and made more interactive. The research organisation has to be decentralised and based on a high degree of participation, networking, innovation, and an open dialogue.

The decision-makers – both in the political and economic system – are pressing for and trying to a new production of knowledge – a Mode II. The investments in the universities have not paid off in terms of innovation, growth and entrepreneurship (Brulin 2002). Instead, new alliances have to be organised, these include researchers, the public sector and the companies that is a *Triple Helix* for innovation and growth (Etzkowitz and Leydesdorff 1997). The new production of knowledge often takes place outside the formal university system.

It is, thus, a new kind of co-operation with researchers that is requested by external actors. With the rising level of education and with new investors in R&D, the 'practitioners' will no longer accept being objectified in the research process. Instead, they prefer co-operation, which is based on equality, flexibility, closeness and joint learning. Because of dissatisfaction

with the inflexible and hierarchical universities, the interest for development research is to a large extent canalised outside the universities (Gibbons et. al 1994; Nowotny et. al. 2001; Tydén 1997).

Can we find a similar development in the Nordic countries – an expansion of Mode II research, inside or outside the universities? Some universities – the reform universities from the 60`s and 70`s, the technical universities and the business schools – have for a long time developed a more problem-oriented and interactive and intense co-operation with different organisations and companies. In Sweden, we have 34 research parks all, but one, are situated close to a university (Brulin 2002). However, in general, the universities have not prioritised this kind of research, but rather devalued attempts that have been made in this direction.² The belief in the universities as producers of useful knowledge has also been put in question. Researchers have traditionally been good at describing and analysing different problems, but have been less successful in offering solutions to concrete problems (von Otter 2001:198).

Some attempts have been made in the Nordic countries to make the universities more open and interactive. In Sweden, the University Law was changed in 1997. The universities were now obliged to interact with the surrounding society. This was called ‘the third task’, something that had to be handled together with the first and second tasks (that is education and research). The new resources, which were invested as an effect of the law, were mainly used for organising contact persons inside the universities, but these new functions runs the risk of being isolated from the informal life of the university and their discipline-based structure (Talerud 2000, Tydén 2002)

In Norway and Finland, a process has started to create a closer connection between public (regional) institutions and universities in order to open up the possibility for local or decentralised research activities. In addition, in Denmark a new university law from 2003 forces the universities to have external managing boards – mainly consisting of members from private business and public administration. The aim is to stimulate a much more demand oriented research and educational profile.

Action research can be a way for the universities to fulfil the third task (Hansson 2003) and to pay attention as well to the demand for local problem solving as to the need of critical and democratic reflexivity beyond instrumental limitations. The founders of action research were also open for the understanding of the local nature of knowledge as for general structural reforms of the society as a whole (Skjervheim 1956; Thorsrud 1960).

The dissatisfaction with the dominance of Mode I research at the universities has lead to the establishment of a lot of new R& D organisations in the Nordic countries. The R&D activities are based on closeness, flexibility, usefulness and a multi-disciplinary approach. The development of research projects is demand based and the centres are therefore seen as important actors in a regional strategy for growth and innovation. In Sweden, there are about 80 in total, often organised outside the universities (Tydén 2002). These centres are funded in

² Representatives for the academic community in Sweden have criticized the new research and educational landscape from an elitist perspective (DN Debatt den 7/9 2003). The quantitative explosion of university education and research – with very limited resources – has lead to a deterioration of the quality, according to the author (a prior director of a big university). The establishment of new regional universities – based on political ideas of equality and fairness – have lead to a fragmented and impoverished research, is another argument put forward in the article.

different ways, often locally or regionally. They are often connected to regional universities and can be seen as ‘bridging organisations’, rather than as competitors. Nowotny et al. (2001) talk in a similar way about the need for *transaction spaces* or *trading zones* between the universities and the surrounding society.

The R&D work at these centres, thus, has great similarities with Mode II research. However, we do not know much about the quality of the research produced at these R&D centres. Some facts point to the vulnerability and short-sightedness in the organisation of these, often very, small units. Another weakness with the new R&D centres is the absence of training facilities for doctoral students. It is only the universities that have the right to train researchers. Such a unity of research and education is fundamental in the Humboldt vision of an integrated university, but it, even today, often difficult to accomplish.

How should we assess the development of Mode II research as presented above, and how is it related to action research? The description made of Mode I and II models of research has a general character. It focuses on the organisation of the research and the mechanisms in the society behind the development of ‘a new production of knowledge’. This analysis does not answer the questions that we are interested in, namely how to unite a short-term practical interest with a long-term theoretical one. We think that most of the spokespersons for Mode II have not addressed the risks of a demand-based research, which is driven by short-term economic motives and practical applicability. The short-term perspective and instrumental ambitions with Mode II research will be no guarantee for a positive outcome, not even in their own limited way of defining success. Innovation cannot be organised or planned in a linear or mechanistic way, because they are to a large extent based on coincidences, chances, accidents etc. (Brulin 2002: 106).

Another critical point is the undemocratic character in Mode II. The objectives and conditions for the research are defined by people with a privileged position in society. There are no ways to guarantee democratic and humanistic values in a Mode II research, nor theories that are of a more general interest or based on critical thinking – like for example a theory about unsustainable aspect of the so-called knowledge or informational society.

In the following sections, we shall see to what extent Mode II research has invaded the action research in the Nordic countries. Of course, action research was not a well defined “unspoiled origin” before the Mode II agendas surfaced. Action research was, from the beginning, a field with many interpretations and theoretical ambitions. However, across the diverse orientations of action research we observe the societal dynamic of knowledge production (invasion of mode II -strategies) as something, which strongly influences different parts of the field. We will discuss the possibilities and risks in the observed development and we will discuss the dilemmas and hopes.

Some shifts in the action research in the Nordic countries

The presentation below will be based on the following shifts in the research during a period of fifty years:

- 1) from experimental to learning design.
- 2) from a consensus paradigm, to a conflict-orientation, and back again
- 3) from employee-based values to broader values

- 4) from a vision of a grand theory to a more pragmatic approach
- 5) from a use of a single method to broad variations.

1. From an experimental to a learning design

The introduction of action research in the Nordic countries should be seen in European and worldwide context. Already from the beginning, the influence of Kurt Lewin was strong, especially the idea of performing experiments in real workplace settings (Lewin 1946). The practical usefulness, the applicability, was an essential part of action research and did influence the methods used – experiments in natural settings (Jahoda et. al 1951).

The theoretical source of inspiration in the introductory phase was the socio-technical school as it had emerged in particular at the Tavistock Institute in the UK (Trist & Bamsforth 1951; Gustavsen 2002). The objective with the R&D programmes was often to introduce autonomous groups in a restricted sense in a small part of a few companies.

In the Norwegian experiments with industrial democracy (first part 1963 –69), Thorsrud and Emery were successful in the making of a Scandinavian model of socio-technical school. In contrast to the English experiments, they had better co-operation with societal organisations – especially the employer association and the unions (Thorsrud & Emery 1969). The idea was that the Scandinavian experiments had a better chance to promote a new societal order than what was seen in the English experiments initiated by the Tavistock Institute. That is also why the Norwegian experiments were termed “Industrial democracy”. Similar experiments, which were supported by the parties on the labour markets, were made in Sweden and Denmark in the 60’s and 70’s.

The outcomes of the changes were often positive, at least in a short-term perspective, but the main problem was the diffusion of the changes – both inside and outside the workplaces. It was as though ‘a fence’ had been built around these small-scale projects (Gustavsen 1996:15). The strategy for diffusion was based on presenting good examples, which should be disseminated on a large scale. However, this strategy for change did not function as intended. The diffusion of the changes seemed to be sporadic and unforeseeable (Svensson 1994). Conflicting interpretations in labour organisations also contributed to the absence of visible results. The employers` organisations were not willing to give up dominance of the production design in a longer time perspective. The interpretation of socio-technical theory or principles as a demand for workers ownership to work organisation (Sandberg 1982) was a too big challenge for the individual employers and in spite of good results (measured on efficiency) the good examples did not spread.

The necessity to develop a more comprehensive strategy for change was obvious in the 70’s. It was clear that the individual field experiments were not enough, neither in creating a sustainable change nor in accomplishing large-scale effects. It was clear that a dualism between development and diffusion was part of the socio-technical approach with its experimental thinking.

The dualism resulted in a split in the action researcher society. One group tried to change the perspective in direction of a one sided resource development in co-operation with unions (see the chapter below). Process oriented experiments were developed in which action researchers, unions and local groups of workers co-operated in establishing local experiments as ‘political

lighthouses' for the workers' movement. They kept the idea of the importance of workers control in labour process development and gave it a political image in terms of emancipation or empowerment (Ehn 1988; Vogelius & Aagaard Nielsen 1996: 42).

The experiments were important contributions to knowledge about workers' experience-based learning and technological innovations. However, in the general neo-liberal trend – with a relative weakness of labour unions in society – such experiments were not successful in spreading either. However, in all Nordic countries you will still find small niches of action research aiming at resource building and empowerment. In those projects the unions play a key role as partners for the action researchers. In Denmark, an action research project organised as a social experiment in democratic industry ran for eight years in a co-operation between researchers, unskilled workers in fishing industry and the unskilled workers union. The project was not a success in a narrow sense in terms of a social experiment. However the project got an impact on public discussion and reforms of workplace related learning, on forms of practical development of sustainable technology and products. And the project delivered materials and inspirations for unions and workers participation in developmental processes in many branches (Olsèn, Nielsen & Nielsen 2003).

A more consensus and system oriented approach to the development and diffusion of local changes, which was based on creating integrated processes for learning and participation, was adapted successfully in the 80's. The objectives for a change programme were now to be decided locally, often in a dialogue between the employees and employers and in connection with many external partners who were relevant for the particular company.

This *system* perspective on change replaced the earlier design, which was based on few and isolated workplaces, from the 60's. Instead of solving local problems, the ambition was to initiate self-development processes in larger systems. The approach was proactive and focusing on future possibilities, rather than on immediate obstacles to change. The wider system perspective, compared with the socio-technical system approach, was more open and focused on interorganisational change and co-operation with external actors and organisations. The changes were seen in a larger context with a more cohesive and comprehensive effort in creating a sustainable change. The participants should develop *action knowledge* – a competence for organising change (compare Argyris & Schön 1989).

In this system approach *networking* (both inside and outside a company) was an important strategy – both to promote change and to diffuse the results. The idea was to create 'a critical mass' to initiate changes on a larger scale and in a more comprehensive way (Gustavsen 1996:18). This *horizontal* approach to change was combined with *vertical* co-operation between workplaces, organisations and institutions (on a local, regional and national level). Horizontal networking was thus combined with vertical co-operation in *developmental coalitions* (Gustavsen et.al 2001). In the 90's the networking strategies developed into theories of *innovative systems* and the *Triple Helix* (Lundvall 1992; Edquist 1997; Etzkowitz & Lyedesdorff 1992).

The system-based approach for change was used for the first time in the Nordic countries when the Work Environment Law was introduced in Norway in the beginning of the 80's. It was no longer a question of implementing the rules in a law, rather a system of activities and changes on different levels that had to be organised. These included training, experiments, research projects, seminars etc. A lot of actors and organisations had to be involved in a long-term development in different sectors in the society (Gustavsen 1996).

A system approach was considered to be necessary for creating *sustainable change*. The conditions for change were found to be very complex, which included different actors, organisations and institutions. In Norway, such a large programme, the Norwegian Enterprise Developmental 2000 Programme, was implemented at the end of the 90's. It was organised as modules – (different groups of researchers in co-operation with regional institutions) and lasted for several years (Alasoini 2002: 67).

The very *process* of change – not the outcome of the changes – was stressed in these new R&D strategies. Because of this new orientation, the research role was changed. The new role for action researcher was to organise this learning and developmental process (Gustavsen 2002). The need for support and consultation in the change *process* was stressed, while systematic documentation, critical analysis, and the production of general theories were seen as less important. Socio-technical and Marxist theories of work and technology were to a large extent replaced by theories of communication, learning, innovation and regional change.

To give up the experimental dimension and replace it with an understanding of change in terms of dialogue and network based innovation has, of course, a pragmatic reason. We can interpret the development as a convergence between action research and the coming upraise of mode II dynamics in the knowledge society. Instead of normative theories of work and demands to reorganise work and change the social structure, action researchers interpreted their role as facilitators of dialogical processes and networking – as experts in organising mode II knowledge. The experimental logic has totally vanished, and so has the potential for action research as a contribution in understanding and challenging the structural nature of current global capitalism.

2. From consensus to conflict and to a consensus paradigm

A research tradition and the institutions, which contain it, is to a large extent influenced by developments in society's economic and political realms. The changes in perspectives, values and political orientations are very visible and distinct in the action research tradition in the Nordic countries. However, we have to keep in mind that different paradigms coexist and compete with each other. We will focus on some of the main tendencies.

The consensus model dominated until the middle of the 60's, both in terms of the strategies of change, and in the research perspectives used. The focus was on productivity issues and on the wellbeing of the employees – often with a focus on health or work-satisfaction. The perspective of power was absent, while the *coalition model* of the enterprise dominated the discourse. The researchers played an important role in improving co-operation between the labour market parties who were introducing the socio-technical experiments in Norway and elsewhere (Gustavsen 2002:25).

The consensus model was later put in question, because of a political radicalisation of the society, which was related to the situation in working life. The negative outcomes of the tayloristic work organisation had become obvious as it resulted of high absenteeism and a high turnover rate among the blue-collar employees (Alasoini 2002:57). The political radicalisation of society put the humanisation and democratisation of working life in the centre of the debate in the late 60's and the 70's. In Sweden, a strike among the miners was a

concrete manifestation of a more critical and collectivist approach in the reformation of working life.

In Denmark, the a new co-operation between academics and workers (AAA: Aktionskomiteen Arbejdere og Akademikere) was an umbrella for action research projects with a conflict oriented target: to build up knowledge to strengthen the workers part in the struggle for better health and safety and for the defence of workers culture in relation to new technological innovations.

This new conflict-orientation, and pressure for more radical changes led to a new strategy, which involved a shift from informal and consensus based agreements to negotiations and actions. This shift in strategy was based on new rights for the employees manifested in a new legislation (about work environment, codetermination and new rights for union officials; Korpi 1978, Hans Jørgen Limborg 2002).

At this time, there was also a paradigm shift in working life research. New questions were being asked and new ways of organising research were being established. Employee-oriented research was organised, which focused on work enrichment, democracy, co-determination, and work environment, health and gender issues from a more conflict-oriented perspective. Some researchers wanted, as mentioned in the discussion of experimental aspects of action research, to make action research solely based on employee values, and with the unions as the prime driving force in the change process. Questions of productivity, profits and competition were not articulated. Some of the unions tried to develop their own strategies for change, including training programmes – often together with action researchers. The emergence of *emancipatory* research was something new in working life in the Nordic countries. The intention was to strengthen weak groups in different ways such as increasing their knowledge, strengthening their self-esteem, constructing new alternatives, and developing new strategies of change (Westlander 1999; Sandberg et. al. 1981, Vogelius &Nielsen 1996).

In Sweden, the Working Life Center was established in 1977 and the Work Environment Fund (in 1975) meant new opportunities for carrying out research also from employee-based values, which was very uncommon at that time. Moreover, in Norway, the researchers at Arbeidsforskningnsinstituttet had the same possibilities (Quale, Thorleif 2003). The traditional employer-based perspectives, which had been totally dominant in the academic world, were now challenged, but only for a while. In Denmark, Finland and Norway, the same financing of research was not possible, but even here research projects were financed by public means or by means from unions supporting alternative research and development. Danish projects were inspired by the German critical theorist Oskar Negt, who practised workers' education as a kind of action research. (Negt 1975).

During the 80's and 90's, the consensus paradigm became totally dominant once again. Economic values – in terms of competition, innovation, productivity etc. – were in focus for the processes of change and the different programmes that were established in many of the Nordic countries (Alasoini 2002:57). Individual values and an idealistic perspective on change processes were becoming more widespread, while the interest in the material conditions of work – including power relations – were less well articulated (compare Liedman 1998). The strategy for change was based on co-operation in partnerships, networks, clusters, developmental coalitions, innovative systems, etc.

To understand the return of the consensus paradigm in the last decades it is important to know how action research has been financed. Various actors have played different roles in the

development of action research in the Nordic countries. In Finland, like in Germany and France, the government or governmental agencies have played a key role as initiators and coordinators of developmental programmes. In Norway and Denmark, the labour market organisations have been more active in organising these programmes. In Sweden – like in the UK and Italy – the regional actors have had a more central role (Alasoini 2002: 58).

In all the Nordic countries, these new actors and investors can explain the enormous expansion of participative innovations during the 80s and 90s. This expansion of action research is quite in line with the development of Mode II research. We can take Sweden as an example of this development. The majority of the research is now being financed by private companies: research which is about three to four times as big, compared to the research finances by the state.³ This research is mainly carried out by private or semi-private R&D organisations. A similar expansion of development research has also taken place in the public sector during the last decades. In the public sector, the research has a more societal and humanistic approach – with a focus on care, health, social work, education and regional development (Tydén 2002). Different EU-programmes have also funded a large part of action research.

However, these new funders of research have a clear idea of what the research should be about and how it should be organised. A co-operative ‘step-by-step’ strategy was strongly supported by EU and other funding institutions and authorities. To get developmental support and research money from different EU-programmes, it was necessary that the developmental work be organised in partnership.

There were other reasons for the revival of the consensus paradigm in action research. Some important explanation had to do with changes in the labour market, in the new political climate, and the limited outcome of the labour laws. The laws and the agreements introduced in the 70’ies were not effective and did not change the power balance in the companies or the labour market in Sweden. The private companies were more offensive and got a stronger position, while the state – as well as the unions – was on the defensive (Karlsson & Svensson 1997: compare Liedman 1998). This is not totally the same situation in Denmark and Norway. At least in Denmark, unions often play a “civilising and mediating” role in participatory development. (Helge Hvid & Peter Hasle 2003). However, the perspective for the unions is expressed along the same consensus orientation as we see in Sweden.

The radicalisation of the unions and the political parties was thus short-lived. The earlier, more conflict-oriented strategy was seen as a mistake, but no deeper analysis was made concerning its failure. The proactive attitudes and earlier visions of a democratic working life among the unions were almost done away with in the 90’s.

The changed situation on the labour market was of special importance in explaining the changes in attitudes. There was a higher rate of unemployment and an increasing segmentation, segregation and exclusion of large groups of the population. These changes

³ The growing influence over research from industry is manifested in an accessing numbers of adjunct professors in Sweden. In some regional universities one of four of the professors is financed in this way. In some agreement it is stated that the companies have the exclusive rights to the results of the research. When critical results are published the researchers run the risk of losing their jobs (Dagens Nyheter den 1/10 2002). In Denmark a growing number of phd-students are financed by private firms. In Norway phd-students are in a growing number integrated in action research programs.

signal a shift in the balance of power, which meant that the employers got stronger and the unions weaker. Ideas of job security was replaced by the widely used concept of *employability*, which meant that the individual had to take a greater responsibility for her/his position on the labour market – by constantly investing in her/his competence development and adapting to the new flexible labour market (Jakobsson & Garsten 2004). Market mechanisms were more widely used and also practised in new fields. The strategy was to privatise large parts of the public sector.

The changes in more employer-oriented attitudes were manifested in different ways such as new management concepts (reengineering, downsizing, profit-centres; just-in-time production; compare Björkman 2001). Implicit in the consensus model for work place development are neo-liberal and individualistic values. There was a growing belief in the individual – rather than collective – solutions in housing, insurance, savings, care and health. The new political and economic climate was inspired by authors like Friedman, Porter, La Page, Hayek and others who got a lot of attention in the public debate (see Liedman 1998).

It is easy to understand why researchers adapted to this changing situation and its believe in a consensus perspective on change. It is quite obvious that working life research, and especially action research, must be seen as an integrated part of the economic, political, and ideological changes in the society. This is not surprising, because action researcher have to be funded for their work.

Nevertheless, what should be discussed intensively are the ideological and legitimising functions of working life research. The researchers have not been passive during the ideological and political changes, but strong co-actors and organisers of these changes. The ethical implication of this role in decision-making is tremendous. However, despite this close cooperation with powerful groups in society, the absence of a critical debate in the scientific community is sensational.

3. From employee-based values to broader values.

To put the point in an epigram: 'A democratic (rather than elitist) methodology for science is the methodology for a democratic (rather than 'elitist) science.

(Stephen Toulmin, 1996:224)

Does the strong development towards co-operative values and a consensus-perspective in action research mean a return to the situation of the early 60's? Was the radicalisation during the 70's and (part of) the 80's only a parenthesis? Not necessarily.

New critical perspectives on working life have been put forward based on health, regional change, gender and ethnicity. Earlier action research often had a focus on the workplace in a more circumscribed meaning. In the 90's, the workplace was seen in a wider societal context focusing on more universal values. Experience at Roskilde University points to the limitations of a local and regional approach to change (Aagaard Nielsen & From Lauridsen 2002). The earlier workers' oriented action research at Roskilde has now been replaced by an upcoming new and broader based regional approach. In theoretical language, you can express the new action research in Roskilde as being based on life-world development in which more universal values are put forward. This focus is in line with traditional humanitarian and democratic

values. The values are, however, not universal in the sense of being eternally true. The combined practical and theoretical aim of the research intends to create a connection between the life world in a local context and the development of the 'common good' or sustainable development in society and in the world.

These changes at Roskilde University had a background in researchers' anxiety to become subordinated or instrumentally bound to certain partners. Such action research will often be instrumental, shortsighted and too locally oriented or too narrowly oriented to an organisational rationality. The new critical research at University of Roskilde tries to involve broader values, which concern environmental, health, cultural, security and gender issues, and also democracy in society. The intention is to develop a form of action research that provokes and questions established truths and partial solutions.

The new types of critical action research are not in opposition to mode II strategies. However, they go further and try to mediate an unavoidable contradiction between common societal problems – often expressed in generalised received knowledge from experts (on for example biodiversity in nature) – and contextual or local problem formulation. The *mediation* is not a compromise, but an opening for societal change at the structural level in the field of action research (Olsèn, Nielsen & Nielsen 2003). (See also articles in part III of this book).

Any researcher has to deal with values in her/his research. An action researcher is more involved in immediate changes and in situations of conflicting interests. There is no simple way to handle the dilemmas with values in action research. One way is to be open and discuss the value basis of one's research. Hidden values should be spelled out clearly (Toulmin 1996:222). The impact of values on the content of the research and research methods should also be part of such a reflective attitude. The action research in the Nordic countries has not been characterised by such an approach, which involves self-reflection. Another way of organising self-reflection is the creation of public arenas for dialogues about general values and orientations, but where these values and orientations are expressed in the local settings. It is analogous to Habermas' concept of the classic bourgeois public sphere in which instrumental local interests are lifted to general societal or common strategies and values (Habermas 1962).

4. From a vision of a grand theory to a pragmatic approach

The experimental design used in the 60's was based on one single, grand theory – the socio-technical school. This idea of a grand theory was later abandoned. There was a growing belief that the problems in working life could neither be solved by a single theory, or by distant armchair theorising. Experiments had to be made in real situations and different theories had to be used to explain divergent contexts and unexpected outcomes. Different case studies of local changes could be presented, but not as a 'best practice' to be used everywhere.

A changed R&D design with a focus on participation and local solutions led to a theoretical reorientation. The experimental sites were now identified as resources to be utilised, instead of models to be applied (Gustavsen 2002:26). Changes could not be developed 'from above', but they had to be organised 'from below'. Theories of learning, and communication were used for analysing such complicated change processes, which were based on participation.

In Sweden, in the beginning of the 90's, the LOM-programme led to a 'communicative turn' in the R&D strategies used. A practical discourse was now seen as the main mechanism for change in working life. In this new strategy, the traditional use of grand theories to steer the change process became outdated. Instead, different theories could be used in a flexible way to guide and inform the changes – for inspiration and enlightenment in the construction of new practices. The theories needed to be linked to specific workplace processes to be useful (Gustavsen 2002:29, 36).

The ambition to generalise the results was low, while the context for change was made explicit and seen as determinate for the outcome. Instead of generalisation, the argument for a societal effect of research was increasingly a question of size or amount of the population involved in programmes. If the population or amount of enterprises were big enough the impact of new practices – and methods – on society passes the *critical mass*.

The theoretical reorientation in action research can be seen as a part of a relativistic trend in the theory of science. The search for structures – mechanisms, regularities, and patterns – became less important (compare Liedman 1998). Instead, the focus was on subjective aspects such as understanding, interpretation, constructions, reflections and communication. Qualitative methods have dominated action research for a long time. The limited number of case studies used made it difficult to generalise from the results (Toulmin & Gustavsen 1997). The priority of local and contextual perspectives in action research made it unclear how the theoretical ideas were related to the particular case studies (Toulmin 1996: 211).

5. From single use of methods to broad variations

Action research in the Nordic countries have used a variety of methods – experimental design, stage setting (Johannisson 2003), participant observation, interviews, surveys, dialogue-conferences (Gustavsen et. at. 2001), research circles (Holmstrand and Härnsten 1993), and so forth. The traditional distinction between an observing researcher and an object for the study is eliminated in participatory research (Toulmin 1996:19). Qualitative methods became very dominant in the Nordic countries in working life research during the last decades. In the Roskilde tradition, action research methods are often based on Future creating Workshops developed by Robert Jungk and Norbert Müllert (1984). The researcher moderates process aiming at a shared utopian horizon among subgroups in the workshop. In the shaping of a utopian horizon you gradually create common values and problems understanding, which goes beyond pure local problems and needs. In the very nature of the methods, you should produce the elementary preconditions for joint reflection and learning. In many ways, the most visual results of action research development can be seen in the emergence of new methods, and the theories behind the methods.

The research role in action research was rather traditional from the beginning. The research should, according to Lewin, have an active and determining role in the planning and organisation of a project. It was the role of an expert with its patronising and manipulative elements. The idea was to conduct laboratory-like experiments in natural settings (Westlander 1999). It was a research *on*, not *with* the participants (Svensson et.al 2002: 10–11).

In the recent decades, more co-operative research strategies have been developed in different countries. The practitioners are no longer seen as passive and seeking helpers or as clients, but as active partners with a potential for development and learning (Westlander 1999). The

vision is to organise a *collaborative inquiry*, which gives the participants some influence over the change and learning processes (Adler et. al. 2004). They should be partners in the construction of a mutually accepted framework. The definition, analysis and diffusion of the results should be a joint effort.

In the socio-technical school, the practitioners' main role was to provide the researchers with data. In the search conferences, introduced in the 80's, their participation was more based on joint learning and reflection. Levin's planned model for change had been replaced by a more open and interactive approach, which included the learning process.

The competence for undertaking action research will be different in a collaborative inquiry. Instead of planning and organising the change and learning process in advance, a more interactive approach is needed. The action researcher must be able to present alternatives, understand various situations and different perspectives, communicate with a lot of actors, support the participants own learning, have a communicative competence, etc. (Westlander 1999).

An important question remains unanswered – to what extent *interactive* methods have been used in action research. Action research has strongly criticised the reifying tendencies of academic research. This is illustrated in the following quotation (Toulmin 1996:222):

Still, participatory action research is untypical, just because it is participatory: in respect, the fault in Mayo's work is that he was *not participatory enough*. His attitude to immigrant women who were the primary objects of the Hawthorne study was too patronising: it never has occurred to him that it was valuable to engage their interests as co-equal partners in the research.

However, this statement about the participatory character of action research has to be proved. Has actual action research treated the actors as co-equals in the research process?

We have seen very few systematic descriptions of such interactive research methods. Despite all rhetoric about involving the participants in the research process, action research seems to have similar objectifying tendencies. The participation in the research process has often been of a limited character – more based on information, feedback, dialogue (in prearranged ways), etc. Action research has seldom been organised as participation among on equal grounds – based on free agreements or a genuine partnership. To do so new interactive research methods have to be developed, which also critically illuminate the interaction between researchers and participants in projects.

Some methods, based on a co-action through the whole research process, have been tried in creating a co-equal partnership between the researcher and participants (Svensson et. al. 2002). The methods used are similar to the joint learning that takes place in a collaborative inquiry (Schön 1983). The researcher and the participants are involved in an exploration of problematic situations. Both are engaged in a joint learning and analysis. Together they test different hypothesis and explanations in trying to understand connections and causes that goes beyond a hermeneutic research approach. In this joint process of inquiry, the learning and action are simultaneous. The outcome is both of practical and theoretical importance.

Similar interactive methods are often used in the development of information and computer technology (ICT). Different solutions are tested by simulation. This practice-orientation

makes it easier for the participant to influence the R&D process. The curiosity and joint interest in exploring a new field is the driving force in this learning and developmental process. So primarily we follow the credo of the mode II strategy: that is to begin problem formulation with very open issues and involve all relevant groups in specifying the knowledge problem. A critical method is to give space for social imagination and shared utopian ideas in the population. With a developed utopian horizon it becomes possible to radicalise the problem formulation of a project and to come closer to the dialogue on general values and problems of 'common goods' mentioned before.

What is the role for the researcher in an interactive process of joint learning? The researchers' main role is not to solve problems, but to assist the participants in defining and analysing them – often by re-contextualising them or creating arenas where participants can play with ideas or systematically explore them. This is a critical approach in which reflection, imagination, and analysis are necessary elements. Such a long-term learning approach differs from the way many consultants are working – despite some similarities on a superficial level (Alasoini 2002: 67).

To carry out interactive research of this kind new competence is needed among the researchers. An organisational capacity is needed. The researcher must be able to organise the co-operation with the participants in a way that stimulates joint learning. A social competence and a democratic attitude are also needed. The researcher is often in a superior position, when it comes to defining, explaining, and interpreting the research data. In interactive research, it is necessary to establish a close, trustful and reciprocal relation with the participants. As an interactive researcher you have to be respectful, open and accepting. These capacities are important elements in feminist research and they will be important in the development of interactive research methods (Davies 1999, Barret 2001, Ribbens & Edwards 1998).

Conclusion

We have not intended here to present Nordic action research in any comparison to international developments in the field. Rather, we have tried to present how global trends in the direction of knowledge society and mode II paradigm have influenced and played together with the Nordic actors in action research. However, in most of the story told above, the Nordic actors have been in the center of global events. Action research – as part of a larger social science tradition – is fairly highly internationalised; networks have been close to Australian, Dutch, German, English and American research teams (van Beinum 1996).

We do not say that Nordic action research is a mirror of local trends, but we can see that action researchers in Nordic countries are influencing the international scene of action research. And relatively seen, the Nordic countries have more action researchers – defined as intellectuals expressing and discussing the basic principles – than any other part of the world. However, we are not sure, that this will be the state of affairs in future, because the coming mode II production of knowledge will call for a more widespread discussion of the basic principles of action research.

References chapter 2

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III A Foundation for Action Research – dilemmas and challenges

This part of the book – including six chapters – will deal with important aspects of action research. The starting point for the analysis is the action research that has taken place in the Nordic countries but the conclusions will have a more general validity.

The first three chapters will focus on some basic foundation for action research. The first chapter will analyse the theories of science and the theory of knowledge that action research have been based on – explicitly or implicitly. The roots of action research in phenomenology, pragmatism and critical theory will be described. The chapter will include a discussion of the dilemma between the participants' demand for contextual knowledge and the researchers' focus on general knowledge (Steen Nielsen & Aagaard Nielsen).

Questions of generality and validity will be dealt with more in detail in chapter two based on a number of case studies. This chapter will also deal with the – practical and theoretical – problems of diffusion. If the outcomes of action research are all contextualised, how can the results be used in other workplaces, and how can the results contribute to a more general knowledge (Eikeland).

What kind of norms and values has action research been based on? What values are implicit in the theories used? What major changes in value orientation are visible during this period and how can these changes be explained? These questions will be dealt with in chapter three. (Sandberg)

The following three chapters are dealing with more practical questions, which are related to the methods used, the role of the action researcher and the forms for organising action research. The first of these chapters illustrates the differences of methods used – search conferences, dialogue conferences, workshops, etc. (Drewes Nielsen). Another chapter is a discussion of the role for the action researcher and how this role has changed over time (Westlander). Where and how action research should be organised has been debated with intensity over the last decades – at the universities or in different local and regional R&D centres? What are the possibilities and limitations for these two alternatives – both from a practical and theoretical perspective? What differences can be seen in the Nordic countries in this respect, and what conclusion can be drawn from such a comparison (Tydén will be the editor of this chapter, but he will work together with Deichman Sorensen, Siggård Jensen och Alasoini.)