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Research as Action

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Badanie naukowe i działanie

Научные исследования и действие

Abstract: Unobtrusiveness in an esteemed quality according to several texts on research methodology for the social sciences. In trying to reconstruct reality the researcher following the advocated model should avoid being seen or heard on the research site or at least try to minimize observer effects on behaviors. In that way, it is presumed, the researcher can be assured that the real system is being observed rather than a distorted picture of it.

The action research tradition takes approximately an opposite position. The main function of research is to make use of deliberate action to find out how the system is functioning while disturbances are invoked. Research is connected with action rather than unobtrusiveness.

In this essay we juxtapose the two approaches, i. e. avoiding versus advocating researcher effects and claim that no matter the intentions of the researcher, reality is inevitably transformed when social systems, notably organizations like businesses, are studied. The researcher is likely to become part of the reality for people involved in the systems under study. We give a few examples in support of the claim and delve into the most important methodological question given that claims: so what?

AVOIDING RESEARCHER EFFECTS — THE TRADITIONAL VIEW

Preoccupation with observer influences on people's behaviors plays a dominant role in most textbooks on methodology. Indirectly, the mere use of the word "observer" serves to stress the fundamental notion that

the researcher as a person is a major source (or the source) of defective data and fallible research results. In a well known text the worry is phrased as follows:

> *(Researchers) conduct themselves in such a way that they eventually become an unobtrusive part of the scene, people whom the participants take for granted and whom they consider to be nonthreatening. Many of the techniques used in participant observation correspond to everyday rules about inoffensive social interaction; skill in this area is a prerequisite for doing meaningful fieldwork.*
>
> (Bogdan & Taylor, 1975:41)

That is to say that processes of research work like gaining access, establishing rapport, interviewing, etc. should all be guided by the wishes of the researcher to avoid being part of the scene under study. The researcher has an obligation to employ special techniques to minimize the potential bias effects in the data collection and analysis stages of a study.

Similar worries have been aired by Webb et al. (1966). In a discussion about sources of invalidity of measures, reactiveness of respondents is pointed out as a major source:

> *The most understated risk to valid interpretation is the error produced by the respondent. Even then he is well intentioned and cooperative, the research subject's know-ledge that he is participating in a scholarly search may confound the investigator's data.*
>
> (Webb et al., 1966:13)

This kind of reasoning leads the authors to argue in favor of nonreactive research methods like measuring physical traces (erosion and accretion), using archives of different kinds (public and private), and applying contrived observation (of the Candid Camera type). Ethical problems arise in these contexts. Privacy is invaded, but according to the authors nonreactive research methods are invaluable when it comes to correcting weaknesses in traditional methods. In fact they propose multiple operationism — a collection of methods combined to avoid weaknesses.

ACTION SCIENCE

The philosophy inherent in action-based social science approaches, i. e. action science, action learning or action research, is that action is taken precisely in order to affect behaviors. The practitioner and the researcher are collaborating and the latter is in no way trying to minimize effects of actions taken. Rather the deliberate effort is to evoke

strong reactions from the persons involved in the study. In that way learning is facilitated for the researcher and for the system under study as well.

The general notions of action science are based on Lewin's writings (1951) on field theory and his contention that disturbing a system is the best way to understand it. Students of organizations have later taken up the ideas of action research in various ways, notably Clark (1972) in connection with organizational change. A related approach, action learning, proposed by Revans (1982) centers on individual learning, but has been extended to encompass organizational learning as well.

Lately Argyris *et al.* (1985) have published a comprehensive book on action science. In the latter book the authors make the specific point that action science is "combining the study of practical problems with research that contributes to theory building and testing" (p. x). Ideally action science should therefore lead to descriptive as well as normative knowledge. However, action is at the heart of action science. Theory and practice are seen as intertwined and so is thought and action. People apply theories-in-use when acting, so the mechanisms that transform theories-in-use are essential for action science.

Common for the action-based social science approaches is one and only one prerequisite: action. Action is prescribed for the scientist who is actively engaged with the client system and concerned with changing it in what is conceived of as a desirable direction. In fact, close cooperation between the researcher and the practitioner is required since they are both involved in the action. Anyway, ethical problems arise in this context as well. Here privacy is not the major concern. Rather, notions about "desirable direction" and dysfunctional effects of action are in the forefront.

A CRITIQUE OF TRADITIONALIST AND ACTION VIEWS

If one sets out to analyze differences and similarities between the two approaches as outlined above from a research or scientific perspective, one is overwhelmed with the degree of similarity involved. Apart from the dividing line and general attitudes towards action/nonaction, differences are modest. That is true at least when it comes to the general vocabulary for describing desirable acts for the researcher. The main differences seem to occur in the phase of transferring results to the scientific community and in how the question of access to the research site is gained. We will limit our critique to these aspects.

Traditionalists seem to fear accusations of researcher effects and bias the most. "Das Ding an sich" even plays a minor role, while a ma-

jor portion of their writings are concerned with measures taken to avoid bias. Still the literature is full of examples on how biases do occur (see e. g. Wirdenius, 1958). Biases tend to have an unavoidable character, no matter what precautions are taken. The traditionalist way to handle the problem though is to describe painstakingly all the details of the precautions and then pretending that no biases exist (or possibly saying that results are inconclusive due to conceivable bias distortions). Very seldom is the bias itself included into the analyses.

On the other hand action-oriented researchers often avoid reporting their studies to the scientific community altogether. Their role as consultants tend to take over, so they refrain from reporting or do so in a casual, unacceptable way even if results are worth while transferring to other researchers. The tendency to avoid reporting is understandable if one takes the secrecy commitments of a consultant into account, but we sincerely suspect that secrecy commitments are often exaggerated.

Action-oriented researchers who do report findings seem now and then to overestimate the importance of action and their own effects on the sequence of events. Reports are frequently transformed into gigantic ego trips, where essentially all events are described as resulting from consultancy action. Labelling a study action-oriented certainly carries with it the pitfall that actions on the part of the researcher are ascribed too eminent roles. Again the tendency is comprehensible if you consider research reports to be written for potential clients rather than for the scientific community, but nevertheless it appears irresponsible and not dedicated to furthering the general esteem for researchers.

Remaining reports an action-oriented research seem to have one general drawback in common. That drawback is related to the action perspective inasmuch as it presumes a mutual learning experience (cf. Gilmore et al. 1986). In most reports authors seem to encounter difficulties in handling host — researcher relationships. For instance, they do not make host effects on the researcher communicable at all, but center exclusively on what the host seems to have learned in the course of the study.

Turning to the question of gaining access to a research site one might distinguish between various motives that people in the host organization might have for participating in a study. Traditionalists seem to rely mostly on voluntaristic motives of an altruistic type. The subjects are assumed to participate in a study just because they thereby contribute to societal development, advance future education or the like. Selfish, egoistic motives are usually disregarded, assumed to be absent or regarded as a nuisance. So are non-voluntaristic motives, where participation is guaranteed by coercion (from employer or boss, etc.).

'Action researchers seem to concentrate on selfish motives but disregard compulsion as a factor in the study. In any case motives for participating are important for the effects that the researcher might have on the system under study. Before delving into that let us summarize the taxonomy for motives:

— Voluntaristic motives (consent)
  * altruistic
  * egoistic
— Non-voluntaristic motives (force)

When altruistic motives are dominant you might expect a certain disinterest on the part of the host and the impact of the observer/researcher is likely to be the least. If compulsion is involved it is easy to suspect that the student runs the risk if being misled. When egoistic motives are involved, honesty in reactions and relations should be expected, but the imprint or the change in behaviors are likely to be strong. Previous experiences seem to say that as soon as egoistic motives are involved, research in "living systems" tends to become action.

THE HEISENBERG PROPERTY

The Heisenberg principle as it is used in physics stands for the fact that one cannot know at a given time with the same degree of accuracy both where an atomic particle is and its momentum. The more accurately we know where it is, the less accurately we know its momentum, and vice versa. And there is no method of measuring position and momentum that can escape these consequences. This physics principle has been transferred to the social science area by Schwartz and Jacobs (1979) with a slightly different meaning: "In our formulation the process of observing something about people changed the very thing it sought to observe" (p. 128). The name chosen by Schwartz and Jacobs for the transferred principle is the Heisenberg property.

You might dispute whether the principle really can be transferred to the social science area, but there are several examples in the literature on studies of social systems where it appears that the Heisenberg property actually was observed. For instance, that holds for several traditionalist studies, where authors have worked with notions of bias and of how observers and observation methods might transform behaviors. Actually, the main thrust in the study by Wirdenius (1958) mentioned previously centres on developing solid methods for measuring what is going on in the work-place. The main finding is that studies of the type investigated cause "arousal" among people under

study. Certain aspects of the workplace are then brought forward since people feel that an ongoing study might be connected with future changes in one way or another. People afraid of reorganization or rationalization measures tend to make the situation look beautiful and gloss over present difficulties, whereas people aspiring change make things look ugly and are anxious to demonstrate negative aspects of their work situation. In terms of methodology one might infer that people being observed consciously or subconsciously transmit a message to the observer. Behaviors change and there are no indications that these changes are only temporary. The study that people react to is likely to be perceived as a significant event in the development of the organization.

In a recent study of a naturalistic inquiry type (Lundin & Wirdenius, 1987) the main focus was on management efforts to regenerate an old—time building company. The company had a long tradition of internal recruitment and promotion, but the policy had now been changed and the company had hired its first external CEO ever. The newly hired manager vigorously took action to "open up" the company by recruiting new key personnel from the outside and by making extensive use of consultants brought in for special purposes. The investigators who initiated the study when the new manager was hired got easily access to the process through previous connections with the new CEO, but came to be regarded as "two of those consultants" by the old—timers and thus part of the new company policy.

IMPLICATIONS

The Heisenberg property is at the heart of the argument of this essay, and the central argument goes like this: the world is always in a process of change and observations are part of that change. As researchers we should certainly by interested in the dynamics even if we ourselves are part of these dynamics. Further, the researcher cannot actively do research in a system and at the same time escape from being a part of that system. In practice, we ourselves are integrated parts of the systems we are delving into. We actually become part of the changes we are there to study and there are usually no ways to avoid that. One might even argue that there are no reasons why we even should try to avoid that. Thought and action are intrinsically intertwined for the practitioner as well as for the researcher (cf. Schön, 1983), so the question of distance or closeness to the system under study cannot have that kind of simple solution especially when we are most interested in the dynamics of the system.

One might argue that the whole notion of "bias" is static. In the traditionalist (positivist) view we risk bias due to inappropriate measuring devices or the like, but that bias is not considered to be for real with that view. It only confounds our procedures and our research results. The bias or the processes that give rise to the bias will not affect future events under study. Our main preoccupation should therefore be to correct for bias according to this view, and there is no need to worry about lasting effects of the measurement procedures or whatever caused the bias.

However, that is by no means the view of the essay. We believe that research in the field should be regarded as action and as such part of the analysis.

EPILOGUE

As a useful illustration or amendment to this treatment of research as action the following incident might serve. In the study on regeneration of a building company alluded to above (Lundin & Wirdenius, 1987) the newly appointed CEO was eventually fired. A couple of weeks before he was fired he was interviewed about the developments and asked his opinion of a new phenomenon in the construction industry in Sweden (a new kind of specialist companies). He responded by saying that he could see no future niches for the phenomenon in question. A couple of weeks later when the same person had been fired (and was the former CEO), he responded to essentially the same question by saying that the specialist companies in question were to be crucial for the development of the construction industry in Sweden in the future. When asked about the apparent turn-around in opinion, he smiled and said: "My opinion might have slided a little". However, since we know this person to be very honest, we believe that he gave his sincere opinion at both instances.

The incident serves to illustrate that any disturbance of a system constitutes an action vis-á-vis that system, and that roles are significant for dynamics.

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STRESZCZENIE

W opracowaniu omówione są i przeciwstawione dwa sposoby spojrzenia na badania naukowe: jako na ciąg zachowań skromnych, dyskretnych, nie narzucających się praktyce życia i jako na ciąg zachowań związanych z działaniem, wykorzystujących uzyskane wyniki dla wywoływania zmian w rzeczywistym świecie. Dokonana jest krytyczna ocena obu tych sposobów przy wykorzystaniu koncepcji działania zaczerpniętych z filozofii i nauk społecznych oraz koncepcji tzw. właściwości Heisenberga pochodzącej z fizyki atomu. Główną tezę opracowania można ująć następująco: świat jest stale w procesie zmian i badania naukowe są częścią tych zmian. Naukowcy są zawsze częściami systemów, które badają i nie mogą od tego się uchylać. Myśl i działanie są ściśle zespolone zarówno w praktyce, jak i w teorii. Pozostaje tylko kwestia bliskości czy oddalenia badacza od badanego systemu, która jest sprawą złożoną, uzależnioną m. in. od jego zainteresowania dynamiką systemu.

РЕЗЮМЕ

В статье проанализированы и противопоставлены два взгляда на научные исследования: как на последовательность действий скромных, не бросающихся в глаза, не навязывающихся практике жизни, и как на последовательность активных действий, направленных на использование полученных результатов с целью измененя окружающей действительности. Автор проводит критическую оценку этих двух способов, причем использует для этого концепции действий, почернутые из философии и общественных наук, а также из концепции так

называемых свойств Хайзенберга, взятой из физики атома. Главный тезис исследования: мир постоянно подвергается изменениям, а научные исследования являются частью этих изменений. Ученые всегда составляют часть исследовательских систем, и от этого им никак нельзя уклоняться. Мысль и действие тесно связаны друг с другом как в практике, так и в теории. Остается лишь вопрос — как близко или как далеко стоит исследователь от изучаемой системы; вопрос этот сложный, а ответ на него зависит от отношения ученого к динамике системы.