# Are action researchers mixed up? Reviewing and revising basic assumptions, concepts, and terminology in and by means of action research

Olav Eikeland, Søren Frimann, Lone Hersted and Julie Borup Jensen

Abstract: The article explores and discusses whether we as action researchers are undermining or subverting our own intuitions and intentions, or at least not doing justice to it, when mixing a) learning and exploration through individual and collective action and reflection, with b) elements from conventional research methods. The article's basic question: Can the intentions and results from a) be reduced to and validated fully or partly through b) conventional methods? Can we save the scientific legitimacy of action research by ultimately resorting to conventional methods and theories? What does action research uniquely add in relation to conventional learning, knowledge generation, and change projects? We discuss some challenges raised by questions like these, and suggest ways of handling them. After exploring ways of being "seduced" by conventional methods, we conclude by recommending a gnoseology to replace a one-dimensional epistemology, and by explaining and recommending the procedure of immanent critique as a way of developing insights and competencies from the inside of practices; i.e. a genuinely Action research method.

**Keywords:** basic historical concepts, conventional research methods, data, experiential learning, external relations, geschichtliche Grundbegriffe, gnoseology, immanent critique, inner inconsistencies

Están confundidos los investigadores de investigación-acción? Repasando y revisando supuestos básicos, conceptos y terminología in y por medio de la investigación-acción.

Resumen: El artículo explora y discute si nosotros como investigadores en investigación-acción estamos minado o subvertiendo nuestras propias intuiciones e intenciones, o al menos, no haciéndoles justicia cuando mezclamos a) aprendizaje y exploración a través de la acción y reflexión individual y colectiva, con b) elementos de los métodos convencionales de investigación. La pregunta básica del artículo es: ¿Pueden las intenciones y resultados de a) reducirse a, y ser completamente o parcialmente validados a través de, b) métodos convencionales? ¿Podemos salvar la legitimidad científica de la investigación acción recurriendo en última instancia a métodos y teorías convencionales? ¿Qué añade la investigación-acción que sea único en relación con el aprendizaje, la generación de conocimiento y proyectos de cambio convencionales? Discutimos algunos retos que se presentan a través de este tipo de preguntas, y sugerimos modos de gestionarlos. Después de explorar maneras de ser "seducidos" por métodos convencionales, concluimos recomendando una gnoseología que sustituya a la epistemología unidimensional, y explicando y recomendando el procedimiento de crítica inmanente como una forma de desarrollar reflexiones y competencias desde dentro de las prácticas; es decir, un método genuinamente de investigación-acción.

Palabras clave: Conceptos históricos básicos, métodos de investigación convencionales, data, aprendizaje experiencial, relaciones externas, geschichtliche Grundbegriffe, gnoseología, crítica inmanente, inconsistencias internas

In this article, we explore and discuss whether we are undermining or subverting our own intuitions and intentions as action researchers, or at least not doing justice to it, when mixing a) learning and exploration through individual and collective action and reflection, with b) elements from conventional research methods. The basic question in the article is: Can the intentions and results from a) be reduced to and validated fully or partly through b) conventional methods? Can we save the scientific legitimacy of action research by ultimately resorting to conventional methods and theories? What does action research uniquely add in relation to conventional learning, knowledge generation, and change projects? We discuss some challenges raised by questions like these, and suggest ways of handling them.

As authors, our common starting point is that many academic action researchers with their co-researchers, have a shared intuition that basically, action research searches for ways of learning and generating knowledge designed to reflect the diversity and complexity of human knowing and learning, and of different knowledge forms in modern organisations, in order to bring social research in more adequate directions. Of course, not everyone engaged in action research, shares this intuition, but are more pragmatic in their motivations. We, however, share an intuition about the importance of recognising diverse knowledge forms as starting points for developments, transcending both the simplified division between experiential learning and so-called data-based empirical research, and the similar split between "theory" and "data". The challenge of overcoming divisions like these is, however, more than terminological. It is conceptual and methodological. Different ways of knowledge generation also take certain institutional forms with their divisions of labour, subconsciously for granted. Hence, the challenge is even institutional, concerning the fundamental division of labour between researchers and researched, knowers and known, on which our dominant modern researchculture is based. So, how could we possibly escape or transcend pregiven frameworks we are born and raised into, and necessarily exist within? Can they be dissolved (Aufgehoben) theoretically or practically? Due to space-restrictions, we limit our ambition in this article to indicating directions we consider promising for answers and solutions.

## 1. Current relationships between social research and society: institutionalized assumptions

Various forms of action research (Bradbury, 2015, Reason & Bradbury, 2001, 2008, Greenwood & Levin, 2007) and their relatives (Eikeland 2020) have, for decades, for different reasons, and under different designations, gained popularity in many professions, in management and organisation studies (Coghlan 2019, Hersted, Ness and Frimann 2020), community development (Bradbury et al. 2019, Chevalier & Buckles, 2019, Burns, 2013), and in other areas. The rising interest and spread of action research reflects broader societal changes concerning the social distribution of learning and knowledge generation. Since the scientific revolution in the 17<sup>th</sup> century, modernity has increasingly monopolised knowledge production

socially to specialised and segregated academic and educational institutions like universities and colleges, or to separate research institutions, all based on clear and principal divisions of labour between researchers as knowers and something or somebody else as researched and known.

Over many decades however, during what could be called late- or post-modernity, knowledge production has become gradually more socially distributed among many societal levels and different kinds of organisations and communities, often encapsuled in the term *the knowledge society* (Gibbons et al, 1994, Nowotny 2001). This development has happened as a real, socio-historical trend, reinforced by a gradual recognition that the specialised and monopolised understanding of expertise dominating modernity and modelled on modern natural science and technology, may never have been sufficient. Different knowledge forms have always been socially distributed, but differently at different times and in different cultures and societies. The challenge remains, however, how to recognise this understanding practically, i.e. in a methodological sense; in how social research is done.

As part of this development, both the model of social research as disengaged and externally positioned in a distanced ivory-tower in order to secure both critique and objectivity, and the overly didactic, school-based, pre-practical, and hence theoretical models for teaching and learning, have been under attack methodologically, theoretically, and politically for lack of relevance and validity. As a response, many forms of collaborative, applied or engaged research approaches have emerged and continue to do so, action research is part of this movement. Simultaneously, however, there is currently a "post-post-modern" reaction on the rise, accusing collaborative research approaches for having a tendency to relativize science. This reaction is often expressed as a critique positioning collaborative research approaches as unscientific in their mixing of scientific research with normative stances and social-political activism. This is seen for instance in the "science wars" in the USA, and more recently in Denmark, where specific research communities have been pointed out by government politicians for being activist and pseudo-scientific due to their research methods and fields, e.g. gender, racism, migration and Middle East research (Center for Vild Analyse, 2021). Although this attack has not been aimed specifically at action research, the rationale behind it is applicable to action researchers as well (Andersen 2021).

In light of this, our article explores the hypothesis that the vulnerability of action-based research to accusations as old as action research itself, of being unscientific, may well be due, at least partly, to the fact that we as action researchers often try to conform to a research language developed within and adjusted to more conventional research paradigms. In spite of decades with cascades of criticism against established conventional social research, there still seems to be a strong, taken-for-granted demand that ultimately also human and social phenomena must be described in formats, approaches, and methods developed and cast within dominant models for natural science, technology, and medicine. As we return to below, one reason could be that critiques of positivism have been too clearly categorised as theoretical, while the empirical side of research still operates independently with different forms of "data", and a corresponding, increasingly widespread division between experiential learning on the one hand, and empirical research on the other (Bonss 1982:11). The tendency to see knowledge as a commodity could be part of the reason, as well. The experiential side of knowing is nuanced, ambiguous, contextual, and normative, while a commodity-logic requires standardised, unambiguous, decontextualised, and purportedly neutral ways to encapsulate and convey knowledge (Duus 2008, Eggers 2009).

Divisions like these seem counterproductive to attempts at letting action research find more appropriate expressions and come to its own, however. Conforming to conventional social science language has the consequence that our research practice is experienced as being squeezed into formats that diminish, misrepresent, distort, or even hide what is developed through complex and multifaceted processes of action research. We lack both appropriate concepts and an apt common language to convey the special traits of action research in ways that communicate adequately and nuanced our distinctiveness to ourselves and to both the research and the wider society. To deal with this, we need to explore and discuss changes in the social organisation of research and more broadly, knowledge generation. By social organisation of research we mean the institutionalisation of the relations between researchers and researched, and between formal, non-formal, and informal ways of learning. For our part, this article is our collective and tentative contribution to an emerging, important and necessary discussion.

### 2. Internal challenges in and for action research

As suggested, there are many different versions of action research that all have their ways of conveying learning and knowledge (cf. Eikeland 2012, 2020). Some think of action research as field experiments or quasi-experimental design, others as applied social research, others again as collaborative research, and finally some as practitioner research and immanent critique. The gnoseology-table presented below, illustrates how different forms like these can be sorted according to different relations between "knowers" and "known" among other things. Although action researchers of all sub-categories seem to be concerned with practice in a broad sense, the challenges concerning both social research in general and varied forms within action research as a broad and general designation, are different, depending on what **gnôsis** (knowledge) form is being enacted. (cf. table 1)

First of all, then, we need to show in outline within the article's limits, that our intuition is pointing at something substantial, that there really is something there, which certain core forms of action research is seeking, irreducible to conventional methods. Secondly, our challenge is: How do we articulate, and explicate our intuitions about the potentials in action research clearly and critically, and how do we justify the process and its results as research and as research based knowledge and competence, without falling back on the divisions we feel should be transcended? To be worth while, whether as supplementary or transformative, the practices of action researchers must contain and bring forth insights which are not already articulated or possible to articulate just as well through conventional research forms and related research terms. Our contention is that something important is missed by attempts to reduce or subordinate action research's diverse and basic forms of knowing to conventional research methods, their affiliated language, and their basic distinctions and separations between "data", methods, and theory, action research is not merely a collaborative commitment to change, supported by conventional, applied research. Hence, we need to find answers to questions like how to show and justify the added value of action research concerning research validity and relevance, participation, learning, democracy, and similar objectives, which action researchers often claim intuitively for their approach?

#### 2.1 Immanent critique

Of course, all kinds of both conventional and action research may have value for different purposes in specific contexts. In this article, however, we argue how and why *immanent critique* carries a great but not fully appreciated potential for addressing, containing, developing, and articulating the intuitions about action research's specific added value, and at the same time for developing a stronger basis for a more appropriate and simultaneously scientifically legitimate action research language. Immanent critique has a long and specific history which we cannot deal with (cf. Stahl 2021). We only point to important traits that concern our current research practice and a language conveying research-based insights and knowledge.

Immanent critique addresses internal insufficiencies and contradictions in all kinds of pretenders to dogmatised and unidimensional ways of knowing, fixed positions in schools of thought, discourse formations or generally in all ways-of-doing-and-thinking-about-things, which are taken subconsciously and uncritically for granted in given communities and societies, both scholarly and quotidian. Immanent critique questions and problematizes all such basic assumptions, and exposes if and how proclaimed principles and aims remain unfulfilled, often by necessity, by their adherents. Critical ambitions like these concerning basic assumptions are often shared and explicitly espoused by action researchers. Immanent critique often does this by showing how certain ways-of-thinking-and-doing-things are always already, practically and tacitly, present inside and as part of the very activities denying them and trying to exclude them. For instance, when action researchers experience that the insights of an action research project are multidimensional, but present their projects in a unidimensional research language, we see an insufficiency that may be caused by either uncritical approaches to research communication, or by an outside demand requiring conventional research communication formats. This means, of course, that even challenges and insufficiencies within action research need to be addressed critically. Basically, immanent critique is therefore first and foremost a kind of practice already implicitly embedded and at work in normal linguistic practice. The possibility of context-transcending and -sublating critiques like this is always already presupposed in normal language use (Eikeland 1997, 2022). That is why immanent critique is not a separate and competing substantial position, school of thought, theoretical paradigm etc. It is an activity inherent and latent in ordinary use of language, which needs to be made explicit, developed, organised, and perfected.

### 2.2 The "assimilation-relapse" of resorting to conventional language and concepts

To pick up on the challenge, then: Practitioners in many professions experience a political and organisational pressure to justify how their work either builds on research or could be justified as research in itself (Weinberger & Weyringer 2015). The conventional slogan is that professional practice must be research based, i.e. based in knowledge produced by generally recognized research methods. In order for professional practitioners to avoid appearing to most spontaneous and doxic perceptions of research as merely inferior, "pre-scientific", "anecdotal", marginalised "experiential learning" from work and practice, they seem to need to refer their efforts to conventional methods as a legitimising way of articulating professional development and generation of professional knowledge. This is expressed in a language,

which proves findings and assertions by resorting to interviews, questionnaires, unbiased observations, or other conventional methods that are generally acknowledged in a wider societal sense, and by combining extant theories and practice in what some call "practical syntheses" (Grimen 2008).

Similarly, action researchers are *also* often referred, feel compelled, and actually do resort to a spectre of conventional, mostly qualitative or interpretive social research methods, within which a certain approach to knowledge is embedded. Ultimately, both professional practitioners and action researchers, lacking more adequate ways of thinking, seem to conform to "collecting data" by means of some generally established "data-collection method", and to "interpret" their "findings" in light of some extant "general theory", the way research approaches and methods are normally taught in universities. The question is if and how this validates, merely supplements, or in deed obfuscates the "added value" of action research, and of the learning acquired through professional and everyday practice.

In consequence, current action research projects are often embedded in many different research traditions and approaches deriving from both the humanities and social sciences, drawing on different general, scientific paradigms, such as positivism, phenomenology, hermeneutics, critical theory, pragmatism, social constructionism, etc. as well as different theoretical approaches, such as systems theory, complexity theory, post-structuralism, process philosophy, etc. As critical methodological discussions over decades have shown, however, separated theories and methods like these are themselves saturated with validity challenges. We will not attempt to delve into every such theory and method here. Neither are we suggesting any "whole sale" rejection or acceptance of any theories or methods. Our point is simple. Such theories, paradigms, etc. cannot be uncritically adopted as arbitrarily chosen identities and legitimizing "stances" without critical questioning, discussion, and justification. action research as immanent critique questions or deconstructs "basic assumptions" everywhere. All mere assumptions must be "picked apart", and remounted critically. Hence, such positioning can hardly be used the way even many action researchers do, as unquestioned, "safe havens" or "last resorts" trying to save their status as research scientifically (or merely rhetorically) through such positioning. The real challenge for action research as immanent critique, however, is not merely to question, criticise, negate, and deconstruct all fixed positions, but to produce something "positive" beyond the splits and divisions mentioned above, as the outcome of the critical deconstruction of basic assumptions.

Since there are no universal panaceas nor safe havens, then, critical exploration and thinking is always necessary from the inside of all practices; the paradigms, positions, divisions, and splits mentioned included. That is how real development happens, not merely by uncritically accepting, shifting, and exchanging models, theories, philosophies, or whatever as unmediated alternatives. But even with a skeptical-phenomenological *epokhê* bracketing all of the above positions, starting anywhere *in medias res* would still presuppose and imply what the Germans call *geschichtliche Grundbegriffe* or *basic historical concepts* (Brunner et al, 1979–2004). Basic historical concepts are not simply the present authors' subjectively preferred last resort and suggested panacea, however. They are what everyone is socialised into as a member of societies and cultures, *before* becoming specialised students and researchers. They are what we have to be able to do, and how, in order to do the things we inadvertently do in our everyday lives. They are what we have been given through our upbringing and culture as tools in order to start at all, to learn specialised methods and theories. Hence, although such historical concepts, theories, and methods are surely existentially unavoidable, they must still

be scrutinised like all others. Since we necessarily exist and practise from the inside of such concepts, they too must be deconstructed and reconstructed from the inside. Basic historical concepts are normally tacitly taken for granted, however. Hence, they are usually not even considered by social researchers. They have histories of development, of construction, establishment, deconstruction, and transformation, however; *Wirkungsgeschichten* of which we all are products. We would like to present such historical concepts as part of a way of thinking, carrying a hitherto mostly neglected potential in social research, and for action research in particular. We cannot examine them thoroughly here, however, for lack of space.

### 2.3 The Trojan horse: Justifying the "added value" of action research for research, development, participation, and change efficiency

To move directly to one major point, then: Programmatically, as a starting point but ultimately as a most secured stance for immanently critical action research, we posit the preposterous thesis to be critically explored but eventually and hopefully defended, that basically, action research is at work as the experience-based and self-reflective method of normal science methodology. The recognised and accepted research methods of conventional social research: observation, questioning, experimenting, are indeed, part of what we have inherited as basic historical concepts and ways-of-doing-things. As already indicated, immanent critique is a kind of practice already implicitly and subconsciously embedded and at work as a crtitical potential in normal linguistic practice. There is no inconsistency, then, in claiming that normal, mainstream methodologists do practitioner-Action-Research, experiential and apprenticeship learning, and immanent critique subconsciously, without self-reflectively knowing and recognising it. It is in fact their experiential method of methodology. This means a certain kind of action research as reflection in and on practice, works as an unavoidable Trojan horse inside the high fortress of normal science, inside the discipline of methodology, i.e. inside the discipline ultimately legitimising conventional social research. Practitioner action research, experiential learning, critical self-reflection, recollection, and immanent critique: -ways of doing things, which conventional, modernist research has explicitly been trying to exclude and replace, are all core parts of the methods of social research methodology, even if done subconsciously and lacking in conscious distinctions.

If this can be shown concretely, then, the conceptual walls between conventional empirical research and experiential learning tumble, and so do the attempted conventional and *Popperian* demarcation lines between science and whatever does not qualify. The tumbling walls do not justify or indicate that "anything goes", however, only that there are no sharp and clear either-or demarcation lines. Instead, there are gradual transitions, developments, transformations, and emerging concepts and insights. By making this visible, and thereby liberating the Trojan horse, deconstructing the walls between normal, empirical social science and experiential learning, the problems outlined at the start can be discussed more openly and maybe even solved constructively, i.e. by sharing the until now privileged methods of methodology with all other professions, rather than trying to monopolize them solely for the professional researchers. This is a way of outlining what immanent critique could amount to. It does not merely tear down.

To give a better indication of this, we need a few more examples, however, of how challenges and insufficiencies in conventional research can be submitted to immanent critique. There are many insufficiencies inherent to conventional social research methods, and as indicated, to much action research as well. Most of the conventional insufficiencies are well known and recognised, at least sub-consciously, and discussed in almost every current text-book in research methodology. For reasons of space, however, we must limit ourselves to three quite general challenges: 1) some difficulties with the concept of "data", 2) the logical challenges with "theory-pluralism", and 3) the challenge of specifying what methods the discipline of social research methodology itself relies on in justifying and legitimising empirical research in its conventional forms. This last form is already outlined above as immanent critique by means of the Trojan horse within the walls, at the core of conventionalism.

The chosen three challenges could all be called theoretical. It is important to emphasise that the challenges confronting action researchers are not merely theoretical, however. The danger of thinking critique to be merely theoretical has already been pointed out. The challenges are also doubly experiential as a) problems with the concept of data, and b) as tensions and clashes often encountered by action researchers directly concerning research discourses and taken-for-granted-assumptions about knowledge production in different lived situations. For example 1), when writing project proposals for external funding bodies who may operate with basic assumptions about social research as visitor based and based on specific external relations between researchers and researched, knowers and known, 2) during the action research process itself when encountering conventional institutionalised practices, logics, and taken-for-granted assumptions about what research and knowledge is supposed to be in partner organisations, 3) when evaluating "outcomes" or so-called "findings" of action research projects, and 4), when reporting on projects and their "results" to external partners and funding institutions. When engaging in action research projects, we often experience many different interests at stake among the involved partners simultaneously: economic, political, and different knowledge interests. In addition, we sometimes meet similar challenges colleagially in our own research environments at the universities, which can be considered as methodological, ideological, and political battle fields. At first glance, challenges seem terminological, but underlying terminological issues lie conceptual and instutional challenges as well.

#### Data-trouble

For instance, the term "data" entails ideas about the existence of unprejudiced, theoretically uncontaminated, true, valid, and separate "bits of information" accessible for every unbiased observer, possible to "collect" by means of specific "data-collection" methods (Bonss 1982, Dear 1985, 1995). But "data" are both theory-dependent and theory saturated. They are created and selected from an endless, undifferentiated universe of potential data as either relevant or irrelevant in relation to some specific theory or hypothesis. Data are also culturally and theoretically *saturated*. Different people, cultures, etc., even astronomers and nuclear scientists, perceive whatever they perceive, *as* something in particular, determined by different technical and institutional arrangements, ingrained competences, and *basic historical concepts* in their culture, community, and society. Theories, and more broadly, cultures make certain "data" salient and visible but ignore or hide others. Hence, phenomena for which some cultures or professional communities have concepts and words, may become invisible or at least harder to grasp through cultures which do not.

Hence, *data* are not *given* for just any observer imagined to be positioned unprejudiced, unbiased, and without Baconian idols, outside whatever is observed. Their relevance as "data" is necessarily decided by whatever theoretical, cultural etc. prejudices determine both their "what" and relevance. Sociologists ignore the positions of planets and stars, for example. Using the term "data" therefore, activates a line of reasoning derived from theoretically clarified, natural and technical science. The term operates under a logic in which culturally made, i.e. artificial constants in the world can be extracted, used, and studied as isolated observational bits of information or "snapshots", maintained in a "frozen form" in order to "indicate" changes, effects, and specific theoretical conceptualisations at work, e.g. between time 1 and time 2 in fixed data sets.

#### Theory pluralism

This real nature of "data" also becomes more important when seen in connection with the following. In addition to the challenges with the concept of "data" in itself, there is the challenges of theory pluralism, made popular in anthropology as the "Rashomon" effect (Heider 1988). This name is taken from its namesake film by Akira Kurosawa, wrought around a story where three people have totally different accounts of "the same" event where they were all present simultaneously.

The formal structure in this challenge is well known in logic as an implication of the false inference called "affirming the consequent". The fallacy is illustrated in the following, logically valid syllogism where the major and minor premises about fishes and whales are both false, while the conclusion is true. The true observation that whales are warm-blooded still follows logically as conclusion from the false premises. Concluding bottom-up *from* true conclusions that the premises are true, is a fallacy, however. Replacing fishes with M shows that claiming *anything* (X) is warm blooded: i. e. an endless number of theories, could "prove" deductively that whales are warm blooded in this valid syllogism.

Premise 1: All Major premise / Explanans (Interpretans)1	M (fishes [or Xs]) are P (warm blooded)		
Premise 2: All Minor / Explanans (interpretans) 2	S (whales) are M (fishes [Xs])		
Conclusion: All Explanandum (interpretandum) - Observation	S (whales) are P (warm blooded)		

The point is that false premises *can* prove true conclusions (which is what the Rashomon syndrome poses as a dilemma). You cannot conclude that the premises, i. e. that any specific explanation is true merely from the fact that the present premises *could* produce the observed true conclusions logically (affirming the consequent), since an endless number of theories could. Since this inference is used in the currently popular, so-called *abduction* or *retroduction* as conceived even by Peirce as "a weak kind of argument" "reasoning from consequent to antecedent" (Peirce 1992: 189, Fann 1970), it needs to solve the challenge. *Abduction* is no safe haven either. Since only knowledge related to the "analysis" of specific and unequivocal "data units" is acknowledged as scientific knowledge, this posits another challenge as part of the Trojan horse in the middle of science. But neither the crumbling demarcation walls around

science nor the Rashomon syndrome justifies that anything goes. It only shows that the post-modern dissolution of science lies as a threatening possibility right underneath the surface, in the internal structures of modernist science. It needs critical consideration.

Action researchers are not primarily occupied with generating knowledge about external objects in the physical world, however. The attention of action research is directed towards ways in which learning, human actions, and social change processes, in and between people in organisational settings and elsewhere, can generate and gather insights and understandings into common, shared, as well as idiosyncratic patterns, from and for practitioners' ways-of-doing-things in organisations, and in other social contexts. Fortunately, the discipline of research methodology itself incorporates such practical insights and understandings. Such a processual perspective on knowledge struggles, however, when confronted with "data" as fixed, unchanging, and unambiguous bits of information. This means that, if squeezed into the reasoning of natural science, processes of knowledge generation from within practices disappear as "un-datafiable", and we are left without a valid way to articulate the processesual and experiential aspects of the knowledge generated.

Answering the challenge for action research of how we can convey this knowledge in a transparent way, which others (researchers, practitioners, citizens) also can understand and evaluate critically, however, we now might learn from the discipline of methodology as the articulated common professional competence core of conventional social researchers. Basic social, organisational, psychological, and similar historical and societal competence and conceptual knowledge may simply be irreducibly methodological in character. Continuously fluent processes are not chaotic. At this point, our working hypothesis has evolved to a tentative claim that we may have what we need if we take into consideration the critically reasoning and careful handling of language that is implied in *immanent critique*, starting *in medias res* with "geschichtliche Grundbegriffe" and with the always already extant Trojan horse methods of conventional research methodology.

#### 2.4 Gnoseology - what specifies action research as different? Sorting it out.

To grasp the added value of articulating the intuitions of action researchers even more adequately, we take a short detour to the *gnoseology* table below, showing different forms of knowing: **gnôsis**-forms, —elicited from the thinking of Aristotle. The scheme, developed and explained in Eikeland (1997, 2008, 2013, 2022), distinguishes between different ways of knowing. The ancient Greek word **gnôsis**, *Kenntnis* in German, means acquaintance or familiarity as a much wider concept of knowledge than **epistêmê**. An epistemology has in a sense already decided and chosen its "favourite", i. e. **epistêmê**, as its standard of measurement. In contrast, *gnoseology* is the study of several different cognitive (**gnôristikós**) forms or ways-of-knowing illustrated in the table.

The Aristotelian gnoseology is multidimensional, relational, non-reductionist, and complex. Our argument is that for action research to realise its specific added research and other values, it cannot use the table's specific **epistêmê**<sub>2</sub> (privileged by modernity) as its only and ultimate standard, since it is adjusted to and belongs to knowers-researchers positioned outside and separate from their known-researched object. Gnoseology does not. This kind of extraneous **epistêmê**<sub>2</sub> was *secondary* and *applied* in the thinking of Aristotle. The primary and more basic form: **epistêmê**<sub>1</sub> was understood as an articulation of **praxis**-forms. While as-

tronomy was the paradigmatic model for **epistêmê**<sub>2</sub> or **theôrêsis** in the table, grammar should be seen as paradigmatic for the kind of action research theory we are after, as the extraction of **theôría** as **praxis**-forms from the inside of ways-of-doing-things: from the inside of **praxis**. To do *basic* research, then, you need to be a practitioner and think first-person-thoughts critically from inside ways-of-doing-things.

A gnoseology like the table's is more adequate to the extant diversity of knowledge forms. Instead of subordinating all forms not fulfilling the requirements of science (epistêmê) as inferior, as does modern epistemology: gnoseology recognises different relations and forms of expertise more or less adequate to whatever is researched or known. It also accepts starting points for gradual and critical developments from anywhere in prevalent doxa (éndoxa) of different communities of practice (in the ruins of the fallen Popperian demarcation lines), and shows how the different knowledge forms are rooted in praxis as permeating the others. The forms in this table are neither necessarily mutually exclusive nor fully comprehensive, however. Other relational forms are imaginable and could be added.

The forms are based on different relations between knower and known. First, moving down the table from the top, from 1 through 7, there is a gradual approachement between knower and known, from clear-cut separation and distance in (1) through different forms of interaction in (2–4), to overlap and identity or indistinctness in (5–7). As part of these differences, the location of *the source of change* in what is studied and known also switches between knower and known. In both forms of theory (1 & 7), the source lies inside the known. That is why they are both theoretical with Aristotle. In 2–4 the source is outside the known. In **pathos** the known is in us as knowers, but the source of change is external. In 3–4 the known is external but the source of change is in us as manipulators and users, i.e. outside the known. The relations between means and ends shift similarly. In **gnôsis**-forms 1 through 4, means and ends are formally different and separable, in 5 through 7, they are formally identical and inseparable. In 1–4 the means are disposable or exchangeable instruments or tools, in 5–7 the ends are inherent in the means as the virtuoso performance grows from inchoate starting points inside **praxis**. Practice makes perfect. As the table indicates, for Aristotle specific ways of using language: **lógos**-forms, correspond to **gnôsis**-forms with their purposes or ends.

These different relations *define* specific forms of general acquaintance, knowledge-knowing, or competence, relations that are required to learn and develop the specific forms. You become a mechanic, carpenter, or mason through practising and through apprenticeship learning, you become a driver the same way, but the first one by learning to change or manipulate something as *material*, the second one by using something as an *instrument* without intentionally changing it. Indeed, you become a researcher in any field in the same way. As indicated, there are two forms of **epistêmê** or theory, (1) **theôrêsis** = **epistême**<sub>2</sub> and (7) **theôría** = **epistêmê**<sub>1</sub>. Astronomy has served as a historical paradigm for **theôrêsis** as theory-form, grammar could serve as a similar paradigm for the second form of theory or **theôría**.

The way Aristotle distinguishes, **praxis**-forms do *not* relate to external entities at all, as do forms 1–4. Instead, **praxis** relates to internal, shared objectives as internal standards of performance: i.e. **eupraxía** or good practice, like we all do in grammar. We share grammar and grammatical forms in common, as equals, as necessary preconditions for being able to communicate. As Aristotle describes it, so it is with ethical and political virtues like justice, friendship, etc. They form mutually shared and common standards for all, as preconditions for optimal, coordinated interaction, as a common good. In **praxis** the knower and known are

Table 1: Aristotelian gnoseology: forms of acquaintance and ways of knowing

Articulating and ar- ticulated	sophía sophía							
English equivalents	Spectators' conceptions (observation), "objectively" explanatory, predictive modelling (traditional theory)	suffering; "passion"; to bear, endure, undergo passively / re- ceptively / "passionately" from the outside	Use of external(ised) objects as instruments or tools without intentionally changing them	Making: produce / bring forth / create; by manipulating external objects and material, forming material in accordance with plan	Doing; performance, practical reasoning and ethical deliberation	Practising, exercise, rehearsing, trying for developing competence, mastery, aretê and insight (theôría)	Insight, understanding of forms, patterns (critical theory)	
Associated rationality	<b>Apódeixis</b> (deduksjon, demonstrasjon), didaktikk	ئن	Tékhnê (calculation, logismós)		Phrónêsis (practical wisdom, prudentia) specitifc form of del- iberation or boúleusis)	Oritical (distinguishing, sorting) dialectics / dialogue as reflection The way from <i>novice to expert</i> , from tacit to articulated knowing	Critical, inductive dialogue, the way to insight ( <b>nê hodós</b> )	
Acquaintance- form <b>gnôsis</b> - form	1.Theôrêsis = epistêmê <sub>2</sub>	2.Páthos	3.Khrêsis	4.Pofêsis	5. <b>Praxis</b> <sub>2</sub>	6.Praxis <sub>1</sub>	7.Theôría = epistêmê <sub>1</sub>	
<b>Aísthêsis</b> (persepsjon)			Empeiría (praktisk tilegnet og opparbei- det erfaring) og enérgeia (virksomhet/ virkelighet)					
Basis	Practised forms of <b>héxeis</b> (pl of <b>héxis</b> ) or habitús (pl of habitus)							

strongly overlapping or identical. The ethico-political virtues are forms of **praxis**. If our relationships to others slide into **khrêsis** or **poíêsis:** i.e. **tékhnê**, where someone *uses* or *manipulates* others for private or other purposes extraneous to those others, or even into **theôrêsis** or **pathos**, the relationships transform gradually into relationships where nothing is common between knower and known as Aristotle describes them. Still, these (1–4) are the forms, according to which modern epistemology and the forms it has recognized, is cast.

For our purpose, it suffices to emphasise that among the **gnôsis**-forms in the table, what has been left on the outside of "science" in modernity, **praxis** and **theôría**, are exactly what action research, together with vocations and professions, must learn to take hold of and develop. Leaving **praxis** and **theôría** outside has failed, as indicated by the Trojan horse above. After deconstructing the demarcation wall between "data" and theory as "scientific" inside, and "unscientific" experience "outside" the walls, claiming this is both justified and possible. It would take us too far to go into details, however. As suggested, the officially expelled and exiled ways of learning and exploring, still hides *within* the walls as the methods of methodology itself. **Praxis** develops from inchoate beginnings with novices, to expertise and virtuosity as ultimate forms in any and every field, even within conventional research. Hence, the **gnôsis**-forms do not necessarily exclude each other.

**Praxis** permeates all forms, since this way of learning and development through immanent critique goes through all the different gnoseological relations. As the way or **hodós** of the others (Jensen & Eikeland 2020), this is what core action research needs to take hold of. Under whatever label or designation, this is the specific value added which action research represents. To summarise: We argue that the specific core of action research we are searching for is more like grammar, i.e. like forms and ways-of-doing-things we always already, and inadvertently live, do, and share as *geschichtliche Grundbegriffe*, while normal, conventional science: searching for prediction and control of the known, has been moulded historically into forms 1–4 as externally based spectator's- or visitors'-research, imagining a clean-cut base positioned outside history and society for itself as knower, from which to observe, explain, and intervene in the known. Even interpretive social research is struggling in the wake of these forms, but without really exploring the table's forms 5–7 for fear of moving too far outside the imagined demarcation walls.

The relational perspective implies that different knowledge forms are mutually independent, with their own ways of learning and validity criteria, but also interdependent and related to each other. Therefore, both the idea of a uniform "unity of science" as well as post-modern ideas about an endless diversity of equally (in-)valid and juxtaposed knowledge forms are both foreign to the gnoseology of Aristotle. Gnoseology still paves the way for a closer integration of traditional, practical, tacit, emotional, experiential, and intuitive forms of knowing, however, which is the argument in this article for playing with the gnoseology as a possible basis for developing an adequate language for modern action research. Furthermore, the argument for our gnoseology-base is that we can throw new light on the terminological problems above, as the table helps us realise that, in modern science and research, some of the knowledge forms (1–4) like **theôrêsis**, **epistêmê**<sub>2</sub>, **tékhnê**, and **pathos**, have illegitimately been given a universal hierarchical priority and superiority, or are seen as more valid representations of knowledge than others. However, Aristotle's other forms of knowledge and knowing provide us with possible paths to rediscover specific conceptualizations of the "added-values-insights" of action research.

#### 2.4 Towards a conclusion

Often, action research is described as "applied" science or research. This may mean either the application of results of a methodologically separate and specialised scientific research, or it could mean the application of mainstream research methods for practical, not theoretical purposes. Applied research is, on many occasions, quite useful for the development of new products, services, procedures, ways of organising etc. But mostly, in these kinds of projects, the researchers remain detached from practice, i.e. from the application, and from the people involved (for instance patients, employees, users, citizens etc.) and the relationship between researchers and people involved is still based on the traditional division of labour between knower and known, researcher and researched (or appliers / users), where the principled distinction between researcher and practitioner is maintained as in the table's **theôrêsis** and **tékhnê.** Application *is* technical.

The previous paragraphs indicate a radical turn of relationships, however. The most clearly applied gnôsis-form in the table is theôrêsis or epistêmê, the most basic are praxis and theôría. In principle, theôrêsis necessarily applies concepts better known and understood to explain less understood observations, without asking how what is used to explain: explanatory theories and premises, become better known in the first place. The challenges above concerning "data" and theory-pluralism inhere specifically in theôrêsis. For Aristotle, basic research or generation of knowledge and insights happens through the gradual and distinguishing development and enactment of praxis and theôría. Hence, action research differs from applied science, among other things because action research emphasises co-creating both knowledge and change (personal, organisational, communitarian or social) through engaging in common practices, e.g. through dialogically based processes where people (without socially determined divisions of labour) come together to experiment with new initiatives and actions in practice, sharing critically as equals through dialogue and cycles of learning through doing and reflection, trying things out. Initiatives and actions are evaluated both con- and recurrently during the process by the people involved. This means that practice is constantly developed and improved by the many voices involved in, and contributing to the change, reflection, and knowledge creating processes, in principle as done in developing the discipline of methodology.

Some co-creative action research projects are still based on a collaboration between professional researchers and practitioners, where what they bring with them from their "home bases" to the dialogical co-creation encounter has quite different bases; substantial practical experiences or theoretical models and conventional research results respectively. In such cases, where background knowledge and experience differ radically, the borderline between action-based development and application of preconceived knowledge is hardly clear. It means another social demarcation line is disintegrating. Some action researchers prefer the terms "researcher" and "co-researcher" or name all participants as "co-researchers" (inclusive the researchers from the university or similar institutions). However, as higher education becomes increasingly socially distributed not only hierarchically within industrialised societies, but between cultures world wide as well, the principled distinctions become hard to maintain.

Hence, compared to applied and conventional science, action research operates with a "post-demarcation-line-distinction" between "researcher" and "practitioner". Practitioners and researchers are colleagues, both knowers and known but still recognises informal and

temporary differences between "masters" and "apprentices". In other words, action research offers a completely different frame and very different conditions for participation in the knowledge production process than seen in conventional or applied research. Herein lies the democratic and transformative potential and possibilities for personal, organisational, and societal impact, and even for basic insights into and understanding of real interpersonal, organisational, and societal conditions and patterns.

Both applied science and conventional science are shaped according to knowledge forms dominant during modernity belonging to theôrêsis and tékhnê, or they keep struggling in their wake. The real "knower" in applied science is still usually understood as the academic researcher, who is positioned as an expert and maintains a monopoly of defining which kind of knowledge counts. The main understanding of knowledge production in this research tradition is understood as representing a separate and external "reality" and as such, transmittable from individual A to individual B as if words made by speech-sounds and written letters carry competence and knowledge in themselves, and with validity challenges already indicated, action research offers a frame for knowing and knowledge development, which is wider than and very different from, the traditional idea of representation and theoretical transmission, action research is concerned with development and transformation through collaborative processes of knowledge creation, sometimes labeled "co-creation", "co-production", or "co-construction", rooted in praxis. action research recognises and involves different ways of knowing as outlined in the gnoseology-table. People with different backgrounds are recognized as significant and indispensable contributors to processes both of change, development, and the generation of basic knowledge and understanding (theôría).

#### 3. What are we left with?

Our point of departure was that we wanted to describe a landscape, pinpoint challenges, initiate a discussion, and suggest some ways out of dilemmas raised by the often inapt language and conceptual distinctions provided by conventional methods. As action researchers, we *all* need to escape the currently common relapse into, or at least know more clearly what we are doing when, applying normal research methods as "last resorts". They cannot provide a safe "scientific" haven. We need to develop concepts and ways of communicating, which are better adjusted to knowledge production *from within* different practice-forms, adjusted to ways of conceiving and describing collaborative knowledge production and learning processes as they play out in a cross-field of tensions between various discourses and institutionalised practices. Overall, the challenge is that social or human knowledge development and knowledge production needs to come to its own and find its own form, like natural science and technology might be said to have come to its own during modernity.

Our suggested ways out have been immanent critique, basic historical concepts, gnoseology instead of epistemology, and to explore and develop the gnoseology-tables's **praxis**<sub>1</sub>, **praxis**<sub>2</sub>, and **theôría** as ways of knowing. Immanent critique is *both* argumentative clarifications *and* development of experience simultaneously, i.e. experiential learning of more or less adequate ways of doing things based on qualitative experimentation, trying things out, and evaluating, summarising, and coalescing experiences. This means to theorize practice through **praxis**- and experience-based argumentative distinctions and clarifications, as we have tried through this article, and like people have always been doing through the methods of research methodology and even more broadly through apprenticeship learning. action research cannot be reduced to interpretations of, or inferences from data or to data. Our point is not necessarily to abandon e.g. the term "data" completely but to be better able to discuss what we are doing when we resort to conventional methods and terms, and how it possibly could either distort or supplement and support the core of action research.

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#### The Authors

Olav Eikeland (born 1955) has his PhD in Ancient Greek philosophy from 1993 on the relevance of dialogic philosophy for doing and understanding modern life and society. He is professor of educational and work life research at the OsloMet University, Norway. From

1985 to 2008 he worked at the Work Research Institute (WRI) in Oslo. Besides ancient philosophy, his research centers on general theories of knowledge, philosophical and methodological aspects of social science and research, action research and organizational learning in modern organizations.

Søren Frimann, PhD in organizational communication, associate professor in action research, organizational development, and leadership at the Department of Culture and Learning at Aalborg University, Denmark. His research focusses on action research, action learning, organizational learning, leadership development, dialogue, and discourse. He runs the Danish action research Network (DAN) in collaboration with other researchers. He has research and development projects in the fields of action research in public and private organizations, organizational learning, and management development. Søren is currently section head of two research groups.

Lone Hersted (Master of Arts, Ph.D) is Associate Professor at the Department of Culture and Learning at Aalborg University, Denmark. Her teaching and research are concerned with action research, leadership development, organizational learning, dialogical processes, cocreation, change processes, roleplaying and learning in groups and teams. She is head of the research group POLO (Processes and Learning in Organizations). Publication list: https://vbn.aau.dk/en/persons/121673

Julie Borup Jensen (MA, Ph.D.) is affiliated Department of Culture and Learning, Aalborg University, Denmark. She is a Professor in Professional and Organizational Development through Aesthetic and Creative Processes, and she leads the research group Capacity Building and Evaluation, a group of 20 change-based researchers doing research within the Danish public, private and volunteer sectors. Her own research is focused on understanding professional judgement as an aesthetic, cultural and organizational phenomenon, a field of complex knowing that needs a new language and concepts to be communicated and conveyed. Full profile: https://vbn.aau.dk/da/persons/119811