ABSTRACT

Everyday learning, inquiry and scientific research, all involve acquiring new ways of action and habits to control connections. Scientific research proceeds within the academic community and may be more disciplined and target-oriented than everyday inquiry, but both are experimental action where one gains experience, thus learns. From the very beginning, pragmatists have taken scientific experimentation to be the model that all thinking and knowing should follow. We acquire knowledge by doing, in transactions with our environment. Therefore, we can only have knowledge from an actor’s point of view; on the other hand, knowledge is a matter of linguistic affair. Adapting a famous pragmatist slogan ‘learning by doing’ we could also say ‘inquiring by doing’. As the figure below describing a research process shows the most essential thing in a research process is that it seeks answers to accurately posed research questions – partly arising from the theories of the field – and that all concepts within the framework can be operationalized into precise research actions. The aim of social scientific research is to discover social mechanisms, recurrent sequences of events and their effects – intentional and unintentional consequences – that is why the applied methodology is relational. Pierre Bourdieu’s key concepts field and habitus, as thoroughly relational, are apt tools also in the context of pragmatist research methodology.

Keywords: Bourdieuan field, pragmatism, research process

INTRODUCTION

Our presentation combines some methodological ideas of American Pragmatism together with a French sociologist Pierre Bourdieu’s thinking. The reason why we present in the following some rather basic principles of research methodology simply is that we are worrying about the state of art in empirical research in social sciences. Namely, at least in Europe, especially in Finland, too many persons in the field of sociology just write quasi-theoretical texts in a very high level of abstraction. No matter how trendy their topics are, nobody can be sure whether the texts have any connections with outer world. If this is the way in which the things are, there is a danger that new generations cannot learn to do empirical research work at all. That’s why it is good to go to the basics from time to time.

Referring to John Dewey and Gilbert Ryle, this paper leans on the distinction between ‘knowledge that’ and ‘knowing how’. According to Dewey, we may be said to know how to do something on the strength of our habits and learning does not have to be conscious. We walk and read, dress and undress, and do countless other things without thinking about them. Most aspects of our action remain in the sphere of ‘knowing how’ — they remain tacit. Only the linguistic ‘knowledge that’ involves explicit conscious reflection. Knowing how means doing something skilfully: when necessary, skills can be measured by performance and its results. We can only have knowledge about the correct principles of an action after the action has occurred; this is why a part of this specific action has to be based on such ‘knowing how’
that cannot find its origins in ‘knowledge that’. [17, 18] As Albert Einstein, who dedicated his life to physics and the theory of relativity, could already state: “Don't listen to their words, fix your attention on their deeds.”

**SCIENTIFIC RESEARCH PROCESS**

Science is not about revealing the true nature of reality or sanctifying eternal truths, but scientific work simply is solving research problems and answering research questions within a constructed conceptual framework. Science does not penetrate ever deeper levels of reality, because the world simply does not consist of levels. As quantum physics has proved, all that can be said about being is that it moves, is in motion. Instead of vertical penetration, an apt metaphor for the progress of science is the horizontal widening of the web of knowledge whenever new pieces of data will be combined together. The progress of science simply means increasing power to make predictions and assisting people to control changing situations. [15, 16]

Attributes (somehow described) are what they are through the relations they have to other (somehow described) attributes, but nothing can be cognitively dealt with until it is described by means of symbols in some language game. To be an object of inquiry is simply to be an object of intentional descriptions within some language game and thereby related to other described objects in a variety of ways [24].

Scientific research proceeds within the academic community and may be more disciplined and target-oriented than everyday inquiry, but both are experimental action where people gain empirical experience and knowledge, thus learn. From the very beginning, pragmatists have taken scientific experimentation to be the model of all thinking and knowing. We acquire knowledge by doing, in transactions with the environment. As John Dewey [7] says, “ideas are statements not of what is or has been but of acts to be performed”; beliefs and concepts are instruments for coping, just like hands are. Pragmatists understand language as a tool of action, of coordinating actions and coping with the environment: language enables people to predict the behaviour of their fellow actors through communicating who is doing what and so on. [15]

An ancient branch of philosophy, ontology, cherished by realists, is not relevant for empirical research work. It is no more interesting to study the metaphysics of categories, say for instance, social structures than it is to study the metaphysical essences of, say, forks and spoons. “When your fork proves inadequate to the task of eating soup, it makes little sense to argue about whether there is something inherent in the nature of forks or something inherent in the nature of soup that accounts for the failure. You just reach for a spoon.” “It … makes as little sense to talk about a ‘split’ that needs to be overcome between the mind and the world as it does to talk about a ‘split’ between the hand and the environment, or the fork and the soup.” [19, see also 24, 15, 16]

Pragmatism is action-centred. A belief is a habit of action [20]. For pragmatists, both learning and knowing are always affairs of doing and doubt. A living organism does not wait passively for something from the outside to impress upon itself, but it acts on its surroundings and undergoes the consequences of action. Thinking arises in a doubtful situation when acquired habits do not work and it is time to find new ways of action [16]. As Hans Joas emphasizes, constant alternation between creativity and habituality is a core of pragmatist concept of action [13]. In changing situations, we learn by trying out various ways of using tools. By testing how different people react, we learn how others are likely to accept our acts, what is worth doing next, and so on. We learn how things we come across can affect us, how they can prevent our acts, or how we can use them to promote our interests. We learn to manage the connections between events and things and hence also to influence the consequences of our own action, i.e. we learn to manage social mechanisms.

Social-scientific research enterprise proceeds in two phases. In the first, theoretical, phase the goal is to conceptualise the mechanisms of events. The second phase, the phase of case studies, involves systematic empirical investigation in order to test the causal significance of the theorized mechanisms across a number of cases. If social mechanisms are the holy grail of social sciences [10, 11] the question is: how to identify the mechanisms in action?

So, the task is to find field-specific (social) mechanisms. Knowing social mechanisms is the way to understand action in a certain field and to anticipate future events.
Scientific research focuses on strictly bounded, operationalizable, relevant research problems arising from respective scientific fields. All concepts and knowledge is relational: something “non-relational” is impossible to comprehend. “In science, since meanings are determined on the ground of their relation as meanings to one another, relations become the objects of inquiry” [8].

It is the language game that offers the meaningfulness for each description; all ‘substances’ have to be articulated within one language game or another, for there are no knowable substances out there in the world independently of our linguistic descriptions. There is no way to know if an undescribed world has The Way it is. Our mind, or language, does not create the world outside of us, but neither does the world divide itself into ‘facts’. It is only our use of language that divides the world into facts, and therefore truths exist only within language. [22, 23, cf.14]

Facts, too, are operational, not complete in themselves but selected and described for some purpose and ‘no event comes to us labelled as “cause” or “effect.” An event has to be deliberately taken to be cause or effect. Such taking would be purely arbitrary if there were not a particular and differential problem to be solved.’ [8]

In the very beginning, the researcher has to be aware why her topic is worth studying. The next step is to find out what other researchers have done; what problems they have solved. What kinds of theories are available and what do these theories explain or not. After having clarified all this, the researcher is ready to set her unique research problem. A challenge is how to operationalize the research problem into research questions. Another challenge is to operationalize research questions into research operations. (See figure 1.) So the operationalizations are the key how to connect the theoretical work with empirical analysis. The best example of illustrating how operational definitions go is a cake recipe. Preparing a case study is much like making a cake. In both cases improvisation is possible but only within certain limits and in both cases one must keep the aimed result clear in the head to guide individual operations.

**Figure 1.** Step-by-step illustration of a research process
Starting with the research problem, pragmatists operationalize the concepts they use in social scientific research as series of concrete acts. Beliefs are to be weighed in intentional action and its consequences – conceptualizations and research questions must be convertible to actions within research practices. Hypotheses, operationalized as acts to be done, are inferred from the research problem set by the inquirers. Intelligible and relevant research problems worth operationalizing into research procedures must be specified by theories used in some field. All scientific fields have their own rules, traditions and prospects so that relevant knowledge is always field-dependent, flowing partly from the history of the field. [7, 1, 3]

![A Bourdieuan field of relations](image)

Figure 2. A Bourdieuan field of relations

Scientific fields (disciplines) are spaces of opportunities that both guiding inquiries and separating professionals from amateurs. Just as there would be no recognized work of art without a field of art, there would be no scientific facts without a legitimate academic community. Every scientific field has its own practices and social standards: the criteria of rational acceptability are embodied in the social practices of institutions wherein research is refereed, reviewed and cited, and canonized into reference works. A science creates and destroys its own criteria as the result of its own operations — not those of external agencies, not of philosophy, not of science policy. [9, 2]

According to Pierre Bourdieu, research starts by outlining the field – be it for instance the field of science or that of art [2] The key concepts are actors, capitals and habitus. The research proceeds by identifying relations between actors and events; by identifying social mechanisms. Where the boundaries of the field are is another question. For example, Marcel Duchamp’s work of art, named “Fountain”, situated at the Museum of Modern Art in San Francisco, is actually a ceramic urinal; however, a similar object situated outside the museum is just a urinal. Hence, the ‘magic’ power of the field of modern art transforms an ordinary urinal into a work of art “Fountain”.

[Osmo Kivinen, RUSE, University of Turku]
People are born into a social world that is not of their own making: some communities, customs, and languages always precede each of us, and it is through acting within these contexts that people adopt their habits; the customs of a community are passed on from one generation and one individual to others in interaction, within an uninterrupted stream of action. ‘Our habits are links in forming the endless chain of humanity’ [5]. A Deweyan pragmatist understands life in a Darwinian way, as transactions of an organism and its environment, as action and interplay. As living organisms, human beings act incessantly by virtue of habits. People need no particular ‘reasons’ or ‘motives’ for their actions, they have to act for as long as they live. Thus, it makes no sense to ask why to live and act, but how. And people know how to do a lot more things than they can explicate. [21, 17, 18]

Pragmatism, understood in our way, is an antirepresentational and nonrepresentational project. “The world can, once we have programmed ourselves with a language, cause us to hold beliefs” and “we continue to hold the beliefs which prove to be reliable guides to getting what we want” [22].

The human mind is so designed that it needs to be interested in the causes most relevant for the present purpose; because human awareness is limited in scope, it “can be efficient at all only by picking out what to attend to, and ignoring everything else – by narrowing its point of view.” [12]

Causal pressures are described in different ways at different times and for different purposes. There is no way of reaching beyond all descriptions, to make causality ‘as it is in itself’ an ontological category, but the causal pressures people confront in their actions nevertheless provide a sufficient connection between our beliefs and the world, so that “human belief cannot swing free of the nonhuman environment” and “we can never be more arbitrary than the world lets us be” [24, see also 4, 15]

‘To understand is to anticipate together, it is to make a cross-reference which, when acted upon, brings about a partaking in a common, inclusive, undertaking.’ By the same token, ‘to misunderstand is to set up action at cross purposes.’ [6]

CONCLUSIONS

We can not have any God-like point of view. Each of us can only have our own actor’s point of view on anything we do – a living, positioned, interested, involved point of view, right here and now, in the midst of our activities. So metaphysics is practiced from a metaphysician’s point of view, football is played from a football player’s point of view, and social scientific inquiries are carried through from a social scientist’s point of view. [cf. 15, 16]

REFERENCES


How to refer to this paper: