HELDA
HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

UNIVERSITY OF HELSINKI

https://helda.helsinki.fi

Case Study Research in the Social Sciences

Ylikoski, Petri

2019-12

Ylikoski , P & Zahle , J 2019 , ' Case Study Research in the Social Sciences ' , Studies in History and Philosophy of Science Part A , vol. 78 , pp. 1-4 . https://doi.org/10.1016/j.shpsa.2019.10.003

http://hdl.handle.net/10138/350066
https://doi.org/10.1016/j.shpsa.2019.10.003

cc_by_nc_nd
acceptedVersion

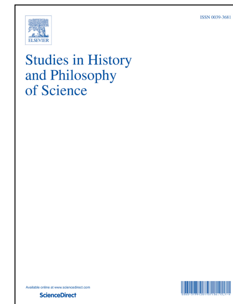
Downloaded from Helda, University of Helsinki institutional repository.

This is an electronic reprint of the original article.

This reprint may differ from the original in pagination and typographic detail.

Please cite the original version.

Journal Pre-proof



Case Study Research in the Social Sciences

Petri Ylikoski, Julie Zahle

PII: S0039-3681(19)30333-4

DOI: https://doi.org/10.1016/j.shpsa.2019.10.003

Reference: SHPS 1480

To appear in: *Studies in History and Philosophy of Science*

Please cite this article as: Ylikoski P. & Zahle J., Case Study Research in the Social Sciences, *Studies in History and Philosophy of Science*, https://doi.org/10.1016/j.shpsa.2019.10.003.

This is a PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article. Please note that, during the production process, errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

© 2019 Published by Elsevier Ltd.

Journal Pre-proof

Case Study Research in the Social Sciences

Petri Ylikoski and Julie Zahle[1]

Petri Ylikoski,
Department of Sociology
University of Helsinki
PO Box 18
00014 University of Helsinki
Finland
E-mail: petri.Ylikoski@helsinki.fi

Julie Zahle
Department of Philosophy
University of Bergen
Postboks 7805
5020 Bergen
Norway
Email: juliezahle@gmail.com

Corresponding author: Petri Ylikoski

Journal Pre-proof

Abstract:

In this paper, we offer an introduction to case study research in the social sciences. We begin with a discussion of the definition of case study research. Next, we point to various purposes that case study research may serve in the social sciences and then turn to outline the main philosophical issues raised by case study research. Finally, we briefly present the papers in this special issue.

Keywords: Case study research, social sciences, case study design, evidence amalgamation, explanation, generalization.

Case study research has an important role in many social sciences including sociology, anthropology, political science, education, organizational studies, psychology, and nursing. It

[1] Both authors contributed equally to the paper.

Journal Pre-proof

should be noted that not all case study research is labeled as such. For example, ethnographic studies are typically not described as case studies. And while most of historiography can be characterized as case study research using historical data, it is almost never presented as case study research. Philosophers of science have paid little attention to case studies and to the extensive literature on this form of research produced by social scientists. This is surprising, especially because many philosophers of science are themselves conducting case studies and there is an emerging critical debate about their contribution.

We are proposing that just as we have a lively philosophy of experimentation and modeling, there should also be a philosophy of case study research. Just like its parallels, it should be open to variance in what counts as a case study, how they are conducted, and what their epistemic roles are. The epistemic role of cases in medicine seems quite different from the role of ethnography in anthropology or sociology. This special issue focuses on case study research in the social sciences. The focus does not imply that other fields employing case study research should be ignored. It reflects the interests of the authors and the heuristic idea that one should start exploration where the expected yield is richest. Case study methods are widely used in the social sciences and there exists a rich methodological literature, making the social sciences a natural place to start.

In the following, we will first discuss the definition of case study research after which we point to various purposes that case study research may serve in the social sciences. Next, we discuss some of the main philosophical issues raised by case study research. We end by briefly presenting the papers in this special issue.

Journal Pre-proof

1. What is Case Study Research?

Case study research is variously referred to as a methodology, research design, method, research strategy, research approach, style of reasoning, and the like.[2] It is sometimes a matter of contention whether to label case study research in one way or another. In our view, these disputes are largely terminological. For example, those who deny that case study research is a method rely on a narrower conception of methods than those who describe case study research as such. For this reason, we shall put this issue to one side and concentrate instead on what is distinctive of case study research. In the literature, there are a number of suggestions in this regard. Here are the most commonly mentioned:

[2] In the following, we are drawing on various discussions of case study research including Becker 2014, Bryman 2012, Gerring 2006, Gomm, Hammersley, and Foster 2009, Hammersley and Atkinson 2007, Merriam 1998, Morgen 2014, Patton 2002, Stake 1995, Yin 2009.

1) The focus of study is a single case or a handful of cases at most.

2) The case is a naturally occurring item or process that is conceptualized as a case of something.

3) The case is studied intensively: the case study researcher collects a lot of data about the case rather than generating very specific kinds of data about multiple cases.

4) The case is studied using multiple methods: as a part of the intensive focus, a case study researcher usually employs multiple methods of data collection and analysis. The research is not method-driven, but question-driven.

5) The goal of a case study is to produce a comprehensive in-depth account of the case. The account is often presented in a narrative form.

The notion of a case is flexible. A case may be a specific organization, group, region of a country, study program, or social policy. It may also be a particular event or process, like a political or economic crisis, an organization change, a successful or failed campaign, or a personal history. What is crucial is that it is somehow a bounded concrete item that is an example of something more general. In other words, it is a case of something. Naturally, one individual item can be a case of many things.

As noted by many case study theorists, the boundary between the case and its context is often not clear-cut. Moreover, while researchers typically circumscribe their case prior to data collection, they may well modify its boundaries both during data collection and data analysis. For instance, a researcher may start out focusing on a particular school, but later narrow down the case to a focus on its teachers only. Though case study research is often associated with the study of a single case, it is nonetheless quite common that two or more cases are involved in the same study. This variant of case study research is often referred to as comparative case study research.

An important characteristic of case study research is that the data should be detailed and cover manifold aspects of the case. In order to collect such data, it is standard to use multiple methods of data collection. Often these methods are qualitative, like participant observation, semi- and unstructured interviews, and analysis of documents. However, the data about a case, or about its context, may also be quantitative, involving, for example, data produced for administrative purposes or surveys conducted by the researcher. In recent times the fuzzy distinction between qualitative and quantitative methods has been further blurred by methods of computational content analysis. Thus, while the study of a small number of cases prevents the use of statistical methods to

Journal Pre-proof

Journal Pre-proof

compare them, it is a mistake to assume that case study research is confined to the use of "qualitative methods". What is important is the key idea of intensive research: the researcher employs those methods that allow her to obtain the information that is relevant to the questions studied. In this manner, the choice of methods is not driven by the aim of using specific method but by the research questions under investigation.

The goal of a case study is a comprehensive in-depth description and analysis of the case. Or as it is also put, the account of the case should be rich, intensive, and holistic, i.e. provide an understanding of the case as a whole. While it is still commonplace that the results of a case study are reported in a monograph, there is an increasing tendency to spread out the results across multiple publications. This reflects an adaptation to a publication regime that is not very hospitable to case study research. While the general conclusions of a case study may usually be reported in one article, the presentation of the data, the analyses, and the discussion of alternative interpretations supporting those conclusions usually require a lengthy monograph. This implies that important parts of the reasoning behind the conclusions presented in an article are not accessible to a reader – something which highlights the importance of trust in the researcher's judgement in case study research.

Journal Pre-proof

2. The epistemic functions of case study research

Just like an experiment or a model, a case study may serve many different epistemic purposes. The following discussion is not intended to be exhaustive, but we hope it gives a useful overview of the landscape. Let us start with the relation to theory. Sometimes a case study is a rather theory-free description of an interesting case. A study of this sort does not employ language that is tied to any specific theory nor does it use any theory to guide how it describes the case. And while the materials produced by such a case study can later be employed as evidence for or against a specific theory, the study itself is not motivated by this use. The theory in question may be unknown to the person conducting the research or it may not exist when the study is conducted. Naturally, a case must be a case of something, but such a conceptualization does not usually presuppose a theory in any strong sense.

The other extreme is a theory-driven case study. A case study may be theory-driven in more than one way. First, the study may be an attempt to test a pre-existing theory or hypothesis. In this case the search for evidence is guided by the theory to be tested: the idea is to check whether processes predicted by the theory are in place and whether there are other processes that may prevent their occurrence. Second, a theory-testing case study may also focus on the presuppositions of the theory

to be tested: if the presuppositions do not hold, the theory does not apply to the case. A third kind of theory-driven case study is one that aims to develop a theory. In this case the processes are closely observed in order to develop and articulate a more general theory that may be applicable to other cases too. So in this situation, the theory is not the motor of the inquiry, but its goal.

Another dimension of case studies is the continuum from simple description to causal explanation. A descriptive case study aims to register the most salient observational facts about an interesting case. Such a study may be valuable both in the sense of being part of a larger project of describing the differences between cases and in the sense of capturing an interesting *explanandum* for later studies. A competently done descriptive case study can be of great epistemic value as it may inspire other researchers to theory development, provide a counter-example to their theories, or simply raise their curiosity more than a case study that aims to support the author's favorite explanation of the case. If data are not collected and presented in order to support any particular theory, the suspicion that the researcher is somehow biased towards a specific account may not arise. At the other end of the continuum are case studies that aim to provide an explanation. These studies take advantage of one possibility provided by the case study approach, namely that of observing a causal process as it unfolds. Naturally, when a case study provides an explanation, the explanation does not rest solely on observations about the particular case. It presupposes a rich body of more general causal knowledge. However, when the causal process observations from a particular case are combined with sufficiently strong causal background knowledge, the product is often a highly compelling causal narrative about the case.

A case study may be self-standing or its purpose may be to support other kinds of studies. The latter occurs when a (usually small-scale) case study is conducted as preparation in order to plan an experiment or a survey. Alternatively, the researcher may be interested in building a formal model of some phenomenon. A preliminary case study allows the researcher to find out what needs to be studied and what kinds of things should be taken into account for the results to be reliable. A supporting case study may also be conducted in parallel with another study. For example, an ethnographic case study conducted at the same time as a field experiment may provide important information about the conditions of the experiment and about possible disturbing factors. Naturally, if such a study is extensive enough, it can also serve as an independent study.

Finally, when discussing the epistemic functions of case study research, it is important to recognize the difference between the aims of a study and the uses to which it may later be put. An author's original intentions may be quite different from the purposes the study ends up serving. And while in

Journal Pre-proof

general it makes sense to hold that data collected for a specific purpose may better serve that purpose than data collected with a different aim, in practice the feature that makes many case studies so fruitful is their recyclability: the authors of these studies present their own interpretation or explanation of a case, but the data they provide about the case are so rich and vivid that others can use them for their own purposes.

3. Philosophical issues raised by case study research

The discussion above has already made salient many philosophical issues raised by case study research. One cannot say that any of these problems are unique to case study research, but one could argue that some of them are very characteristic of it. Here we wish to highlight four sets of questions dealing with study design, evidence amalgamation, causal explanation, and learning from case studies.

First, there are issues related to the design and conduct of a case study. One question concerns the choice of the case: should one choose typical or exceptional cases? And if one is doing comparisons, should one pick maximally diverse cases, or should one focus on cases that differ only in a few dimensions? These choices have consequences for the evidential contribution of the case study, but the decision may also depend on how much is already known about the phenomenon to be studied. As pointed out earlier, a case is always a case of something. But the same item – an event, organization, or process – can be a case of many things simultaneously. How this categorization occurs is another interesting philosophical question.

A second set of problems concerns evidence amalgamation in case study research. Case study research employs multiple sources of data and various methods for analyzing it, and this raises questions: what is the point of employing multiple methods for data collection and data analysis? How does one assess the reliability and representativeness of evidence from different sources? How does one resolve possible conflicts between different pieces of evidence? How much evidence is enough? These problems are conspicuous in case study research, although not unique to it. Similarly, case studies are often combined with studies employing other methods. Similar problems of evidence amalgamation occur here too: How may the insights gained through case study research supplement and be supplemented by findings established by way of other research approaches?

The third set of philosophical issues is related to *causal explanation*. Many case studies claim to explain something about the case. The idea is that a detailed study of the causal process that produced some outcome makes it possible to understand why it happened. However, it is not

Journal Pre-proof

Journal Pre-proof

obvious how this may be done by simply studying a particular case. If one thinks that explanation is based on counterfactual information, the relevant comparative information seems to be missing. If one thinks that explanation requires generic causal knowledge, a similar problem arises: what is the source of the relevant general knowledge? Clearly, explanation of a particular case presupposes some causal background knowledge, but characterizing the nature and the source of this knowledge is challenging.

The fourth group of philosophical issues is related to *learning* from case studies. Traditionally, this has been discussed under the topic of generalization. In a sense, the generalization of case study findings is against the spirit of doing case studies: a case study is often motivated by the wish to understand the uniqueness and context-dependence of the case. However, if the only generalizable result of case studies was "one cannot generalize," another prominent reason for doing case studies would be lost. This tension is the source of the problem of generalization. A case study, no matter how insightful, is a study of a particular case (or a handful of particular cases). However, we are usually interested in it because we wish to learn something that applies also to other cases or maybe to a whole class of cases. People reading case studies often generalize quite eagerly from them, but also feel uneasy as to whether their inferences are justified. No matter how intensively one studies a case, that will not tell how typical or representative it is of a larger population of cases. It is also often unclear what the relevant population of cases is. Both of these make the justification of extrapolation from case studies difficult. At the same time, it is too restrictive to consider learning from case studies only in terms of generalization. There are many ways in which case studies are taken up and used by subsequent researchers. The case may give rise to new concepts, theory-development, advances in methodology, or simply new research questions. Also, case studies are often regarded as a source of inspiration for new policies. The way in which this learning from case studies happens is still a rather uncharted area of philosophy of case study research.

Journal Pre-proof

4. The papers of this special issue

The papers in this special issue nicely illustrate that case study research raise multiple philosophical issues.

Mary Morgan's paper "The use-values of cases: exemplary cases vs exemplary case studies" analyzes what makes cases and case studies useful for a community of researchers. She argues that well-known cases, that are returned to again and again, can either serve as testing-grounds for theories or as constant topics of redescription and comparison. In contrast, exemplary case studies

can serve as catalysts or as crystallizers. The catalysts prompt new research questions for a field, while crystallizers provide an idea or a concept that the community considers useful. Morgan's general point is that the epistemic role of cases and case studies requires close attention as none of these contributions can be conceptualized as "generalization" in the traditional sense.

In his paper "Mechanism-based theorizing and generalization from case studies" Petri Ylikoski also addresses the limitations of traditional ideas about generalization from case studies. He argues that the notion of social mechanism is important for understanding what is learned from case studies in sociology. However, this requires a conceptual distinction between abstract mechanism schemes and particular causal scenarios. Ylikoski illustrates the power of this approach by providing a mechanistic reconstruction of recent study of the effects of rankings on US legal education.

Tuukka Kaidesoja's paper "Building Middle-Range Theories from Case Studies" focuses on how process tracing case studies contribute to theory development in political science. He argues that the account of middle-range theories provided by political scientists Derek Beach and Rasmus Brun Pedersen requires a more elaborated notion of causal mechanism and middle-range theories to work. To resolve these issues Kaidesoja presents his own analytical account of the components of a middle-range theory.

Julie Zahle's paper "Data, Epistemic Values and Multiple methods in Case Study Research" revolves around a characteristic feature of case study research, namely that it involves the use of multiple data gathering methods. Zahle examines the rationale behind the concurrent use of participant observation and qualitative interview while arguing that one important - and overlooked - rationale is that it puts the researcher in a better position to confirm that her data manifest central epistemic values. Also, she shows how this rationale differs from the two standard ones that appeal to comprehensiveness and convergent confirmation respectively.

The fact that case study research involves a plurality of methods is also emphasized by Sharon Crasnow. In her paper "Political Science Methodology: A Plea for Pluralism," she argues that case study research has at least six important roles to play in the production of knowledge in political science. These roles, she shows, do not only testify to the value of using a plurality of methods in case study research. Also – and this is her primary point – the roles bring out that, in political science, multiple methodologies, including not only the statistical and experimental ones, but also case study research, should be employed.

Journal Pre-proof

Journal Pre-proof

The papers in this special issue provide only a sample of the many philosophical questions raised by case study research in the social sciences. However, we hope that they demonstrate that the questions are interesting and inspire more research contributing to the development of the philosophy of case study research.[3]

Acknowledgement

Julie Zahle's research was partly funded by University of Copenhagen's Excellence Programme for Interdisciplinary Research as part of the interdisciplinary research project "Social Fabric."

References

Becker, H.S. (2014). *What About Mozart? What About Murder? Reasoning from Cases*. The Chicago University Press.

Bryman, A. (2012). *Social Research Methods*. 4th edition. Oxford: Oxford University Press.

Gerring, J. (2006). *Case Study Research. Principles and Practices*. Cambridge: Cambridge University Press.

Hammersley, M. & Atkinson, P. (2007). *Ethnography. Principles in practice* 3rd edition. London: Routledge.

Gomm, R., Hammersley, M. & Foster, P. (eds.) (2009) *Case Study Method*. London: SAGE Publications Ltd.

Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.

Morgan, M. (2014). "Case Studies" in Nancy Cartwright and Eleonora Montuschi (eds.) *Philosophy of Social Science. A New Introduction*. Oxford: Oxford University Press, pp. 288-307.

Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. 3rd edition. Thousand Oaks, CA: Sage Publications.

[3] We would like to thank Attilia Ruzzene and Sharon Crasnow for their helpful comments.

Journal Pre-proof

Stake, R.E. (1995). *The Art of Case Study Research*. Thousand Oaks: SAGE Publications, Inc.

Yin, R.K. (2009). *Case Study Research. Design and Methods*. 4th edition. Thousand Oaks: SAGE Publications, Inc.

Journal Pre-proof