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Redefining Case Study

Rob VanWynsberghe
University of British Columbia
Vancouver, Canada

Samia Khan
University of British Columbia
Vancouver, Canada

Abstract

In this paper the authors propose a more precise and encompassing definition of case study than is usually found. They support their definition by clarifying that case study is neither a method nor a methodology nor a research design as suggested by others. They use a case study prototype of their own design to propose common properties of case study and demonstrate how these properties support their definition. Next, they present several living myths about case study and refute them in relation to their definition. Finally, they discuss the interplay between the terms case study and unit of analysis to further delineate their definition of case study. The target audiences for this paper include case study researchers, research design and methods instructors, and graduate students interested in case study research.

Keywords: qualitative methdology, heuristic, research design

What is a case study? Why is it so regularly invoked in educational and other social science research and yet so irregularly, randomly, and poorly defined? Case study is variously defined as a method, methodology, or research design (Bassey, 1999; Merriam, 1988; Orum, Feagin, & Sjoberg, 1991; Yin, 1994). It is used as a catch-all category for a variety of research methods, methodologies, and designs and as a result, loses its meaning. In this paper we address the problematic definition of the case study. We also propose a more precise and encompassing definition that reconciles various definitions of case study research: case study is a transparadigmatic and transdisciplinary heuristic that involves the careful delineation of the phenomena for which evidence is being collected (event, concept, program, process, etc.).

By transparadigmatic, we mean that case study is relevant regardless of one's research paradigm (i.e., postpositivism, critical theory, constructivism). By transdisciplinary, we are suggesting that

case study has no particular disciplinary orientation; that is, it can be used in social science, science, applied science, business, fine arts, and humanities research, for example. We regard heuristic at its most general level as an approach that focuses one's attention during learning, construction, discovery, or problem solving. Eckstein (2002), for example, used the term *heuristic* to describe a special type of case study that employs analytic induction to discover or "find out" the essence of the case. The heuristic in Eckstein's case study is analytic induction, as analytic induction is the recommended approach for focusing one's attention on the case. We suggest that there are several heuristics involved in case study research, and we propose that these heuristics serve continually to focus one's attention on locating or constructing the unit of analysis (the phenomenon for which evidence is collected).

In the following sections we substantiate our proposed definition by examining whether case study is a method, methodology, or research design. We then use a prototype of case study to present common properties of the case study and suggest how these properties support our proposed definition. Next, we superimpose Flyvbjerg's (2001) presentation of social science myths on our proposed definition of case study. Addressing these myths reveals case study—understood according to our definition—as quintessential social science. Finally, we confront the tension between the case in case study and the unit of analysis and, in doing so; further authenticate our proposed definition of case study. Our intention in this paper is not to settle the ultimate issue of what is a case study but to identify several conundrums associated with its use and to suggest an alternative definition that might address several of these conundrums.

The conundrum of the case study

The past three decades of scholarship on case study research have produced more than 25 different definitions of case study, each with its own particular emphasis and direction for research. Three definitions that exemplify the range include the following.

A case can be defined technically as a phenomenon for which we report and interpret only a single measure on any pertinent variable. (Eckstein, 2002, p. 124)

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. (Yin, 2003, p. 13)

A case study is a problem to be studied, which will reveal an in-depth understanding of a "case" or bounded system, which involves understanding an event, activity, process, or one or more individuals. (Creswell, 2002, p. 61)

Eckstein's (2002) definition offers a technical explanation in which the case is a focused object of interest, a relevant variable. For example, a possible case study or phenomenon under investigation could be electoral systems, where the pertinent variable is the general parliamentary election and the single measure of the pertinent variable is the outcome of six such elections in Britain. Yin's (2003) definition appears less technical, but it is still a naturalistic one. It invites the researcher to engage in any necessary ethnographic work that will delineate the event or concept of interest from the backdrop. Exemplary case studies, according to Yin (2004), include *Head Start: The Inside Story of America's Most Successful Educational Experiment* (Zigler & Muenchow, 1992), where preschool programs for lower income children were examined by participant observation within and beyond the Head Start program. Creswell's (2002) definition, on the other hand, appears to call for the researcher to start with a quandary, that will invoke

layers of understanding about the system in which the problem resides. The system becomes the case, and the researcher chooses an event, activity, or process within this system to illuminate it. An example of Creswell's definition at work is the case of a campus response to a student gunman (Asmussen & Creswell, 1995). This case study described the immediate and subsequent response by campus officials to a graduate student who opened fire in his science class. The case study of the campus response to a student gunman illuminated a larger problem of escalating campus violence involving guns in the United States.

Method, research design, or methodology?

In addition to the wide range of definitions of case study as suggested in the above section, current definitions also refer to case study as a method, strategy, research design, or methodology. To call case study a method (a term commonly confused with methodology) would imply that case study is a technique, procedure, or means for gathering evidence or collecting data. Examples of well-known research techniques include interviews, participant observations, and document analysis. Merriam (1988) defined case study as a method or means in the following definition:

The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. (p. 41)

We contend that case study is not a method because case study researchers cannot actually collect data prescriptively using case study. Instead, researchers employ various research methods such as the ones listed above, which act to build or uncover the case. Moreover, despite the existence of many different types of case study (e.g., exploratory, explanatory, extreme, multisite, critical, theory confirming, intrinsic, instrumental, ethnographic, longitudinal, and deviant), none of them require specific data collection procedures.

Second, case studies have also been referred to as research designs. For example, Gerring (2004) stated,

Case study is a . . . research design best defined as an intensive study of a single unit (a relatively bounded phenomenon) where the scholar's aim is to elucidate features of a larger class of similar phenomenon. (p. 341)

A research design is an action plan that guides research from the questions to the conclusions and includes steps for collecting, analyzing, and interpreting evidence according to pre-established propositions, units of analyses, a logic for linking the data to the propositions, and application of set criteria for interpreting the findings (Yin, 2003). The double-blind placebo experiment is a familiar example of an experimental research design. It provides clear guidance to the researcher on how to proceed with the research in terms of number of variables to study, types of controls, and sampling techniques. If a case study were a research design, it would also be able to provide researchers with such a prescriptive plan. Because case study does not offer a prescriptive guide for how to proceed with the business of collecting, analyzing and interpreting data, we do not consider case study as a research design.

Thus, we are left with the possibility that case study is a methodology. The term *methodology*, like *case study*, has little definitional clarity and is commonly used interchangeably with the term *method*. For example, Sjoberg, Williams, Vaughn, and Sjoberg (1991) defined methodology as "the analysis of the intersection (and interaction) between theory and research methods and data"

(p. 29). On the other hand, Harding (1987) defined methodology as a theory and analysis of how research should proceed. It includes accounts of how "the general structure of theory finds its applications in particular scientific disciplines" (p. 3). Methodology, according to Harding's definition, must be situated in the context of the dominant paradigm: the natural sciences. For example, feminism qualifies as a methodology because in part, it privileges techniques (e.g., intensive interviews) that elicit evidence from the individual about how her experience speaks to the broad patterns of interaction that give rise to system inequalities. Providing a rationale for the intensive interview involves discussing how the social sciences generate new knowledge and how a feminist approach is a challenge to the natural science paradigm.

Stake (2005) severed case study from methodology by stating, "Case study is not a methodological choice but a choice of what is to be studied." (p. 438)

This quote is also salient because it exemplifies the confusion associated with the terms *methodology* and *case study*. Stake's definition is noteworthy because, as we discuss at some length in this paper, the researcher does not choose the case; rather, the research process, and specifically the interaction between case and unit of analysis, guides a "choice of what is to be studied."

Stake's (2005) discussion of case study suggests that the case study is not a methodology. Case study arguably does not appear to provide a theory or analysis of how research should proceed. It is possible to create or instantiate a theory from a case study. However, in this scenario, case study is not a methodology because it does not provide a parsimonious theory of how research should proceed with conceptually coherent methods and accompanying data collection procedures that map onto the theory.

Thus, it appears that case study is not a method, a research design, or a methodology. The next section is an effort to provide a prototype view of the typical case study. This exercise provides support for our proposed definition.

A prototype view of case study

A prototype of case study delineates the properties or features that are necessary (but insufficient in and of themselves) for the research to be categorized as case study. A prototype view offers a way of thinking about case study that allows for variability. It presents a defensible, rather than a definitive, take on case study (Sternberg & Horvath, 1995). We suggest seven common features in a prototypical case study Khan (2007).

Feature 1: Small N. The case study calls for an intensive and in-depth focus on the specific unit of analysis and generally requires a much smaller sample size than survey research (Gomm, Hammersley, & Foster, 2000; Yin, 2004). Efforts to perform broad analyses with large numbers of participants can reduce the effectiveness of case study as it might come at the expense of detailed description. For example, a single classroom's use of a computer simulation could be an $N = 1$.

Feature 2: Contextual detail. Case studies aim to give the reader a sense of "being there" by providing a highly detailed, contextualized analysis of an "an instance in action" (MacDonald & Walker, 1977, p. 182). The researcher carefully delineates the "instance," defining it in general terms and teasing out its particularities. To follow the above example, the instance in action might

be how the teacher employs the computer simulation in a teaching episode on intermolecular forces.

Feature 3: Natural settings. Case study researchers choose to systematically study situations where there is little control over behavior, organization, or events (Yin, 2003). Case study is uniquely suitable for research in complex settings (Anderson, Crabtree, Steele, & McDaniel, 2005) because it advances the concept that complex settings cannot be reduced to single cause and effect relationships. Khan (2002) studied how students and teachers worked with a computer simulation to understand scientific concepts and develop skills at inquiry. The researcher did not control classroom events, and the interaction between the students and their teacher unfolded naturally without interventions from the researcher.

Feature 4: Boundedness. Case studies provide a detailed description of a specific temporal and spatial boundary (Merriam, 1988). Attending to place and time brings context to the structures and relationships that are of interest. The classroom, for example, is spatially bound in a formal institutional setting with an established space, set schedule, shared expectations, and often a prescribed curriculum. These boundaries enable classroom researchers to develop focused hypotheses by circumscribing what is inside and outside of the case.

Feature 5: Working hypotheses and lessons learned. Researchers can generate working hypotheses and learn new lessons based on what is uncovered or constructed during data collection and analysis in the case study (Eckstein, 2002; Lincoln & Guba, 2000). The entity or phenomenon under study emerges throughout the course of the study, and it is this surfacing that can bring the study to a natural conclusion (Becker, 2000). Khan (2002), for example, remained open to serendipitous findings in her study of teachers, students, and a computer simulation. She did not test hypotheses in this particular case study but generated several regarding the nature of the teacher-student-computer interactions.

Feature 6: Multiple data sources. Case study routinely uses multiple sources of data. This practice develops converging lines of inquiry, which facilitates triangulation and offers findings that are likely to be much more convincing and accurate (Yin, 2003). In her study of the design of the classroom, Khan (2007) collected numerous kinds of data, including tests measuring student understanding, interviews with the teacher and students, and observational data of teacher-student-computer interactions.

Feature 7: Extendability. Case studies can enrich and potentially transform a reader's understanding of a phenomenon by extending the reader's experience (Donmoyer, 1990). The case study researcher analyzes complex social interactions to uncover or construct "inseparable" factors that are elements of the phenomena (Yin, 2003). In a case study, the researcher seeks to coalesce and articulate these relationships in context often with the hope that the context and relationships may resonate with the reader. For example, although Khan (2002) studied one classroom, she aimed to extend the research beyond the chemistry classroom studied to other science classrooms.

In relation to our proposed definition, the above features overlap with and substantiate our view of the case study as a transparadigmatic and transdisciplinary heuristic that involves the careful delineation of the phenomena for which evidence is being collected (event, concept, program, process, etc.). For example, in feature 7, Yin (2003) emphasized multiple sources of evidence affiliated with different paradigms, such as use of tests, surveys, interviews, and participant observation. In feature 4, Merriam (1988) highlighted the conscious effort of the researcher to

provide boundaries in terms of time and space, which is necessary for the careful delineation of the main phenomena. Through detailed description (feature 2), the case can fully emerge or be constructed from the complexity of the context.

Flyvbjerg's myths

In this section, we employ Flyvbjerg's (2001) myths regarding the social sciences to (a) posit the case study as an invaluable tool for studying social settings and (b) further substantiate our proposed definition of case study. Flyvbjerg resurrected myths concerning the social sciences that, once officially debunked, provide a powerful argument for case studies and their contribution to generating practical and valued knowledge for society. As Flyvbjerg argued and demonstrated, case study is the realization of social science's dedication to "value-rational deliberation and action" (p.167). The debunking of the myths is Flyvbjerg, but their application to case study research is ours. Using case study, we believe that Flyvbjerg has started social science researchers on one pathway toward developing a positive program for how social science can proceed.

Myth 1: Case studies cannot be used to make predictions; they are too contextualized

Flyvbjerg (2001) refuted the assertion that case studies cannot make predictions. Predictive theory has less utility in social science, where, it has been suggested, the context of human activity is more vital to understanding the phenomenon than the human activity itself. Yet, in their representation of concrete, context-specific knowledge case studies make it possible to understand the limitations of prediction and to enable researchers to suggest the circumstances under which a theory might or might not apply (Smaling, 1987). The definition for case study that we propose suggests that case study research involves the careful delineation of the phenomenon. This bounding of the case enables the interested case study researcher to put forward predictions that are appropriate in scope.

Myth 2: Case studies cannot produce generalizations

Case study research does not aspire to universal generalizability in the positivist sense (Donmoyer, 1990; Guba & Lincoln, 1981; Schofield, 1990). As Lincoln and Guba (2002) stated, "It is far easier, and more epistemologically sound, simply to give up on the idea of generalization. If the generalizations are accepted, they should be as indeterminate, relative and time and context bound" (p. 32). Like predictions, generalizations have been recognized as contextual. They have half-lives (Cronbach, 1975) and require continuous updating as the context changes. A number of alternative social science concepts for generalizability have been put forward. These concepts appear to suggest that by comparing the case (to prior knowledge, experience, another case, or another theory), one can further generalize from it (Becker, 2000; Smaling, 1987; Yin, 2003). Our definition is conducive to comparing and contrasting cases as a way to make tentative generalizations beyond the case itself. As with Yin's analytic generalization, we suggest that the similarities and differences found among the phenomena of interest in case study research enable the researcher to expand the scope of the theory that guides or emerges from the original case.

Myth 3: Case studies, like all social science, have limited use as generators and testers of hypotheses

As Flyvbjerg (2001) argued, small *N* qualitative research is often at the forefront of theoretical development and case studies, as quintessential small *N* research may serve as a source of theory building and testing (Eckstein, 2002). Lincoln and Guba (2002) have suggested a concept of the working hypotheses to capture the idea that, although there is no "true" generalization, rather, case study researchers can tentatively apply hypotheses under specific conditions and circumstances. Case studies are also useful for testing the scope of hypotheses, as a single case has the potential to refute a hypothesis. Hypotheses can be generated from a single case or multiple cases. For example, finding similarities among case studies or translatability is the degree to which one case study's findings can fit other cases (Goetz & LeCompte, 1984). We offer a definition of case study that encourages the development of greater clarity via description so that the findings, if they fit, can be translated from one case context to another and potentially test and generate hypotheses.

Myth 4: Case studies are biased toward verification of researchers' preconceived motives

This myth is based on a claim that social scientists are predisposed toward offering subjectively compelling explanations. We join Flyvbjerg (2001) in arguing the opposite. Because the case study involves a careful delineation of the phenomena for which evidence is being collected, it is plausible that the case study researcher is biased toward the falsification rather than the confirmation of his or her preconceived notions about the case. Rueschemeyer (2003) suggested this, noting that case study permits a direct and frequent interplay between theory and data as its advantage compared with experimental or quantitative research. This interplay facilitates a closer matching of conceptual intent and empirical evidence. Our definition of case study calls for such interplay as a key heuristic of case study. If case study research primarily represents an exploration of the phenomena for which evidence is being collected, then this necessitates researchers' immersing themselves in the context to such a degree that they have opportunities to also recognize flaws in their preconceived notions.

Myth 5: Case studies are too difficult to summarize

Case study researchers are often admired for their capacity to introduce "nuance and complexity into the understanding of a given topic" (Collier & Mahoney, 1996, p. 13). This seemingly positive attribute is also a critique that is leveled at case study research because particularistic details are not easily packaged as journal-sized articles. Our proposed case study definition suggests that the case study researcher benefits from documenting and portraying the events, relationships, or processes of interest as these relate to research. We suggest that through detailed description the researcher is further enabled to uncover, delineate, or construct the unit of analysis among a number of potential candidate units of analyses. Once the unit of analysis is clear, the case study can reveal its central message.

In closing, Flyvbjerg (2001) challenges widespread myths surrounding case study and offers a positive program for the expertise and values case study research can illuminate for society. Our proposed definition of case study—case study is a transparadigmatic and transdisciplinary heuristic that involves the careful delineation of the phenomena for which evidence is being collected (event, concept, program, process etc.)—is concomitant with Flyvbjerg's suggestions on what case study offers society. For example, according to our proposed definition, case study promotes learning through the study of the particularities and complexities of a bounded system (Patton, 1990; Snow & Anderson, 1991; Stake, 1995; Yin, 1994). Case studies can contain translatable evidence that move beyond the case itself. Translating case studies can serve broad social functions to describe the values of our society, explore contradictions in our lives, offer

new insights on what has been and should be done, and present new perspectives and interpretations on events. Theorizing about the how question (Yin, 2003; Flyvbjerg, 2001); providing context (Merriam, 1988), exploring theory (Mitchell, 1983), and locating relationships (Ragin, 1997) of value to society, are several of the positive features of case study research that embody Flyvbjerg's notions of the quintessential social science.

In the penultimate section, we discuss the interplay between case study and unit of analysis and suggest that delineating the relationship between the two supports the view that case study is a transparadigmatic consideration.

Case study and unit of analysis

Our proposed definition of case study is, in part, a response to ongoing discussions about the relationship between the unit of analysis and the case itself. The case study cultivates a state of tension between the researcher's unit of analysis and the "iterative flows between the 'case of' and its larger context, which is potentially limitless, [and] beyond the scope of any study" (Potts, 2005, p. 7). In this section of the paper, we address the relationship between the unit of analysis and the case itself and suggest that the interplay between the unit of analysis and the case is a constitutive element of case study research.

Sjoberg et al. (1991) have paid considerable attention to the above dilemma. They identify seven domain assumptions or paradigmatic considerations of research, one of which involves the unit of analysis (the phenomenon for which evidence is collected).[1] For example, one ontological domain assumption is that the absence of women in graduate level physical sciences reflects a social-structural bias that can be addressed through mentoring. This assumption can pre-establish particular units of analyses (e.g., undergraduate physical science classroom), which, in the course of research, has the potential to become more nuanced. The unit of analysis is granular; that is, the particular phenomenon being analyzed (e.g., mentoring practices) can be separated from the broader phenomenon from which it stems (e.g., undergraduate physical science classroom). The case study must adjust to such changes in the unit of analysis that may occur in the course of the research, as the researcher arrives at a situation where he or she cannot force through his or her initial domain assumptions. We agree with Sjoberg et al. that the unit of analysis is important because "what is a 'case' . . . varies with the researcher's presuppositions of the proper unit of analysis as well as other related domain assumptions" (pp. 36-37). The case study is a "coming to terms" with the unit of analysis, which is itself dependent on other paradigmatic considerations.

Two examples will aid our exploration of the relationship between the case and the unit of analysis. The first example is from a legal context. A defense lawyer could choose a variety of types of evidence in defending his or her client, including the life history of the accused, the mental state of the accused at the time of the crime, the circumstances of the crime, the networks and associations of the accused, and even specific cultural aspects of his or her life. For this example, an analogy is being suggested between the types of evidence that the lawyer chooses to focus on and the unit of analysis. If the lawyer chose to focus on the networks and associations of the accused, for example, the case could be "a case of the scapegoat" which illustrates how the accused was only following orders as part of a larger criminal network. If the lawyer chose to focus on the life history of the accused, the case could be "a case of childhood trauma" and criminality. As evidence continues to be gathered in the construction of this case, the unit of analysis is further delineated, and the case becomes more refined (even if the case is fairly well circumscribed at the outset of the research).

VanWynsberghe's (2000, 2002) case study of native environmental injustice in the Walpole Island First Nation in southwestern Ontario, Canada, provides a second example of the correspondence between case study and the case study's unit of analysis. In this 3-year study, the unit of analysis was a social movement's concept of collective action frames. Collective action frame is an umbrella term for building ideological adherence to a social movement (e.g., environmental justice) through solidarity, consciousness, and collective identity. In the case of the Walpole Island First Nation, the researcher was directed by the evidence to analyze the collective action frame in relation to Walpole-based identities, histories of protest and struggles. Other relevant evidence detailed a Walpole Island First Nation that exists as a physical entity because three different peoples (Potawatomi, Ojibway, Ottawa) were contained in a landmass reserved for them by the Canadian government. Additional historical evidence explained that despite linguistic, cultural, and historical differences, these peoples were forced to collectively call Walpole Island home. Thus Walpole Island First Nation is the case study and the concept of the collective action frame, vivified in the connections between a sense of injustice (as informed by context) and community-based protest, is the unit of analysis.

Case study has a relationship to its unit of analysis. It is also instructive to define case study research in relation to other domain assumptions or paradigmatic considerations. The intent of this section is to depict how the relationship between unit of analysis and the case is conflated and how it instead deserves greater illumination. To start, we present Table 1, which situates case study as a domain assumption and also succinctly cross-references them with Guba and Lincoln's (2005) popular breakdown of postpositivist, critical, or constructivist paradigms. Although the paradigms in Table 1 are not exhaustive or encompassing (they have indeed become umbrella terms for a wide array of theories and concepts), the case study-unit of analysis relationship spans them all, suggesting that the relationship may be considered a transparadigmatic one.

Dominant Paradigm	*Positivism*		
Successor Sciences	Postpositivism	Critical theory	Interpretivism
Dominant assumption 1 (inquiry aim)	General explanation and prediction	General critique and transformation	Unique understanding and insight
Domain assumption 2 (knowledge accumulation)	Cause-effect linkages and generalizations	Historical revisionism; generalization by similarity	Reconstructions; vicarious experience
Domain assumption 3 (ontology)	One apprehendable reality	History is shaped by values and contradictions	Relativism: reality co-constructed by particularities
Domain Assumption 4 (nature of knowledge)	Nonfalsified hypotheses are facts	Structural /historical insights	Reconstructions that may achieve consensus
Domain Assumption 5 (methodology)	Experimental (manipulate variables)	Dialogic/dialectical	Hermeneutical/dialectical
Domain assumption 6 (inquirer posture)	Objective scientists	Intellectual as advocate/activist	Passionate participant; facilitator
Domain assumption 7 (Unit of analysis—case study relationship)	See section on postpositivist paradigm, below	See below	See below

Table 1. Case study/unit of analysis as a transparadigmatic consideration

Postpositivist paradigm

Case study research can be conducted within the postpositivist paradigm. Within this paradigm, researchers discover and study cases and can generate and test hypotheses about the real world with them. "Case studies can be seen as studies of empirical units that exist and can be found out, discovered, or delineated in the course of research" (Ragin, 1993, p. 300). The quotation suggests that case study can be defined as the discovery of the units involved in the case study; the units are isolated and the ones of interest studied further. This quotation is somewhat reminiscent of a postpositivist orientation to case study in that the goal of the researcher is to "discover" an existing case that is "out there" (i.e., in reality). Once the case has been discovered, the researcher delineates the unit of analysis by measuring the variables pertinent to the case.[2] A postpositivist orientation to case study research appears to conflate the unit of analysis with the case because the discovery of the case illuminates the presence of the pertinent variable. The context does not appear to figure prominently in the discovery of the case.

Critical theory paradigm

Case study research can be conducted within a critical theory paradigm. Beginning with Horkheimer's (1976) traditional and critical theory and, later, Marcuse's (1964) notion of the one-dimensional man, critical theory has raised important questions concerning theory's ability to find, examine, and transform contradictions in the present order. Efforts to understand and prevent fascism, intolerance, and authoritarianism have revealed critical theory as a wide variety of perspectives that reject the holism and teleology of orthodox Marxism. These theories also attend to history and social structure and highlight the contradictions of our times through the scrutiny of the roles of culture and, later, race, ethnicity, and gender (Antonio, 1990). According to this paradigm, case study can detail a history of contradictions that has led to injustices. A commitment to rationality predisposes the critical theorist to criticize the patterned findings that underlie exclusions and other inequalities (Miller, 1994). The possibility of transformation and the movement toward a better, more rational world is the ultimate goal. The following quotation might resonate with a critical theorist's orientation to the case study: "Case study is a method or a research design best defined as an intensive study of a single unit with an aim to generalize across a larger set of units" (Gerring, 2004, p. 342).

The quotation draws attention to case study scholars who have defined case study in terms of its ability to provide detailed accounts of complex settings. This definition appears to be aligned with critical theory in that it also focuses on reconstructing history to understand the values and practices that are responsible for our state of affairs. Case study delineates between unit of analysis and case study and that the intensive, detailed, and in-depth analysis of the critical theory paradigm is congruent with this goal.

Interpretivist paradigm

Interpretivism focuses on "meaningful social action and . . . an in-depth understanding of how meaning is created in every day life and the real-world" (Travis, 1999, p. 1042). The interpretivist paradigm also assumes that there are many points of entry into any given reality. The focus of the case study within this paradigm is on a particular reality that is of relevance to the phenomenon under study. In relation to case study, this paradigm emphasizes an often story-like rendering of a problem and an iterative process of constructing the case study. A goal of the research is a description that goes deep enough to provide analysis. The following quotation by George and Bennett (2005) leans towards an interpretivist orientation to case study: "The detailed

examination of an aspect of a historical episode to develop or test historical explanations that may be generalizable to other events" (p. 5).

George and Bennett have located case study as an effort to develop theory from a historical episode, which would call for specific methods, such as document analysis. Case study can be congruent with an interpretivist paradigm that assumes that reality is a social construct that emerges from the way in which individuals and groups interact and experiences the world. No final construct of knowledge reigns because what is known is continuously modified as new knowledge adjusts into already existing constructs of knowledge (Mertens, 1998; Travis, 1999). The interpretivist paradigm appears to favor a delineation of unit of analysis from the case itself through the description and attempt to understand the conditions under which the concept, relationship, or event "got the way it is."

Our brief foray into the three paradigms suggests that case study can make a substantial contribution to each. None of the paradigms, however, appears to provide more prescriptive guidance on the delineation of the case from the unit of analysis. Our proposed definition contributes this important heuristic as an essential facet of case study research. When a case study researcher does invoke the concept of case study, our proposed definition would suggest that researchers delineate the case from the unit of analysis, and that this delineation serves a critical function of clarifying what this is a case of.

Concluding remarks

Given that case study is not a method, methodology, or research design, we have invited interested readers to explore a new conceptualization of case study. We suggest in our proposed definition of case study that it is a transparadigmatic heuristic that enables the circumscription of the unit of analysis. The circumscription of the unit of analysis is accomplished by (a) providing detailed descriptions obtained from immersion in the context of the case, (b) bounding the case temporally and spatially, and (c) frequent engagement between the case itself and the unit of analysis. We observed that a prototypical case study already involves detailed description of the context, boundedness and suggested that an interplay between the case itself and the unit of analysis occurs with ongoing data collection using multiple sources and the development or testing of theory. Furthermore, we explored Flyvbjerg's (2001) myths regarding social science to situate our thinking about case study research in relation to these myths. Finally, we acknowledged that finding the focus of a case study is a complex undertaking and recommended that delineating the unit of analysis is vital to uncovering or constructing the essence of the case.

We propose that case study could be considered a transparadigmatic and transdisciplinary heuristic that involves the careful delineation of the phenomena for which evidence is being collected (event, concept, program, process, etc.). Our definition of case study has led us to suggest that case study is not exclusively about the case revealing itself as it is about the unit of analysis being discovered or constructed. This is an important development because it means that researchers cannot definitively state the unit of analysis at the outset of the research; it must come into focus as the research progresses.

Notes

1. Other domain assumptions by Sjoberg et al. (1999) are determined by the researchers' answering of the following questions:

a. Is the researcher committed to the study of the unique or of the general or some variation thereof (inquiry aim)?
b. Are human nature and social reality consistent, or are they rent by inherent tensions or contradictions (knowledge accumulation)?
c. Are appearances to be taken as given or is there a reality underlying appearances (ontology)?
d. Are human nature and social reality fixed and well ordered or are they processual, that is, in a state of becoming (nature of knowledge)?
e. What is the nature of rationality (methodology)?
f. What is the relationship between the social researcher and his or her subject matter (inquirer posture)?

2. The postpositivist paradigm includes qualitative methods in their repertoire of research techniques to provide cause-effect explanations and predictions (Guba & Lincoln, 2005).

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