

Complexity, representation and practice: Case study as method and methodology

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While case study is considered a common approach to examining specific and particular examples in research disciplines such as law, medicine and psychology, in the social sciences case study is often treated as a lesser, flawed or undemanding methodology which is less valid, reliable or theoretically rigorous than other methodologies. Building on discussions of case study in recent years, I argue that case study generates accounts of practice in educational research, which provide knowledge of experience that has conceptual contribution to research understandings of practice. The complexity situated in analysing and re-presenting practice through case study research, along with the connections that the reader makes between the case and their experiences, is powerful in working to inform everyday educational practice.

Introduction

A central tenet of the work that we do as researchers of naturalistic inquiry is to engage with and learn the world in order to shed light, generate new ways of understanding, and seek interconnection in the complexity of the actions and interactions around us. In educational research, case study as both method and methodology affords a study of human, and arguably non-human, affairs resulting in the generation of an account of practice. Constructed and bounded, case study provides analysis of holistic representations of context dependent knowledge of/in practice (Flyvbjerg, 2001). The examination of specific and particular examples through case study is a common approach in disciplines such as law, medical and psychological research where the particular and extreme are documented. Similarly, in educational research, case study dominates as a methodological approach (Periera & Valance, 2006).

In the broader social sciences there are tensions around the use of case study as a methodology. The typical focus on the singular has led to case study treated as a “methodological second best” (Thomas, 2010, p. 575), typecast as a “weak sibling” (Yin, 2003, p. xiii), and regarded by more serious social science research as flawed because of a lack of generalisation able to be built out of the single case – therefore lacking in theoretical induction overall (Flyvbjerg, 2006). However, it is the context-dependent knowledge which case-studies provide examples of that contribute to the knowledge of experience of the researcher and reader; becoming an example to be learned from.

Given its status as a major methodological player in educational research (Periera & Valance, 2006), case study has much to contribute, not least for the representation of complex practices that it affords. However, methodologically and ontologically there is need for consideration and deliberation of what case study can be and accomplish, for what means, and how.

Perhaps contributing to the misconceptions about its theoretical rigour and strength, case study is an often under-conceptualised and surprisingly complex practice of research that is ‘betwixt and between’ that of method and methodology. Dillon and Wals (2006) highlight the differences between methodology – the ontological, epistemological and axiological considerations – and methods – the tools used to generate, collect, and analyse data – claiming that each informs decisions on how the research is carried out, what is counted as data and its ethical treatment, and the implications and challenges of those decisions. Accordingly, Stake (2003, p.134) suggests that case study is other-than methodology, as it involves a “choice of what is to be studied,” by whichever methods are chosen to study it. In this sense, case study as method allows for the generation of data through multiple methods from multiple sources. Whilst methodologically, case study calls into consideration the construction, bounding and representation of the case. This construction, bounding and representation occurs through the decisions and practices of the researcher and the researched in the generation, analysis and re-presenting of data.

It is the purpose of this article to contribute to the discussion of case study foregrounded by the work of Flyvbjerg (2001, 2006), Thomas (2010; 2011) and Taylor (2013), looking to the interconnections of case study as method and methodology that provides an account of practice and practical, context-dependent knowledge in educational research. In doing so, I begin by reviewing some of the criticisms and responses that have been raised about case study, then conceptualise the value of knowledge and representation in case study that contributes to an account of the arrays of activity that form and are forming of practice/s (Stake, 2003).

Criticism of case study

The lack of generalisability to wider populations has been highlighted as a potential weakness in case study research (Stark & Torrance, 2005). However, social scientists such as Flyvbjerg (2006), Gerring (2004), Ruddin (2006), Stake (2003) and Thomas (2010) have disputed the emphasis on generalisability in the critique of case study research, suggesting that those criticisms show misguided and over-simplified assumptions about case study and its value as a context-dependent investigation of practice (Flyvbjerg, 2006). Stake (2000) claims that it is the purpose and meaning made from a case study that shapes its contribution and value, with it being methodologically disadvantaged when the purpose is propositional knowledge. Alternately, for purposes of developing understanding and extending experience of what is already known, the “disadvantage disappears” (Stake, 2000, p.21).

Opposing those who criticise case study as a ‘weak’ research methodology, Flyvbjerg (2006), Stake (2000, 2003) and Thomas (2010, 2011), amongst others, have problematised the role that generalisability plays in social science research. Thomas (2010, p. 577), for example, has suggested that understanding the social through technical theory based on generalisation is problematic and unattainable because of the “contingency of social life and the necessary limitations of the kind and quantity of confirmatory evidence that can be disclosed”. Generalisability in case study, Flyvbjerg (2001) and Thomas (2010)

advocate, is not only unattainable but detracts attention from the purpose, value and insight to the local, particular and practical that is a strength of case study. As Thomas (2010) states, arguments about the lack of generalisability in case study can equally be applied to the limits of induction in social science, do not acknowledge the role of abduction, and fail to recognise that loose generalisations have much to offer to local circumstances – such as accounts of practice in teaching.

Criticism of the lack of generalisability of case study methodology generally point to the lack of ability to inductively build theory through case study as evidence of methodological weakness (Stark & Torrance, 2005; Yin, 2003). However, it is this very focus on the particular, on examples and experiences that enable understandings of accounts of practice (Flyvbjerg, 2001; Stark & Torrance, 2005; Thomas, 2010). The choice of case study provides a means to inquire into the practices of the activities or events being studied, while also existing as context-dependent products of that inquiry – as an account of the arrays of activity that formed and are forming of practice/s (Stake, 2003). Relevant both to educational practice and the research of practice, case study is a method and a methodology that seeks to embrace complexity in the account and analysis of practice which is itself complex.

Representation and place

A case study provides context-dependent knowledge and accounts of practice that are drawn together from the voices, actions, interactions and creations of the carriers of practice in a site. As both method and methodology, case study provides a means for considerations of trustworthiness, such as triangulation of multiple forms of data from multiple sources (Mackenzie & Knipe, 2006), as well as the ontological framing of a case as both pre-existing and constructed – an immutable mobile contextualised through time and place.

The constructed, pre-existing case study provides an account of the actions and practices within the world – as opposed to the actual, in-the-moment actions and practices. In one sense case study can be understood as a representation of those actions and practices. At the same time representation, with the social constructivist emphasis on the divide between the real and the made-up, is in itself ‘constructed’ and insufficient to understanding the always-ongoing actions and practices of the social (and more-than-human) world (Laurier, 2010). As such, the complexity of case study is the attempt at representation of bundles of trajectories that come from a multiplicity of interacting and interrelated living, non-living, and material things, spatially and temporally situated (Taylor, 2013).

The nature of writing case study involves the transforming of the actual, in the moment actions and practices in a setting into a representation that is immutable and mobile. As such the “really real” places, activities and practices are reduced as they become the “really made-up” of representation (Anderson & Harrison, 2010, p. 6). Along with this comes the recognition that the messy materiality – the bundle of trajectories – that constitute place,

exists outside of the representation of the text and data constructions of the case-studies (Watson, 2003). This recognition is important, however, to distinguish from representationalist thinking that suggests place exists only as an “effect of the projection of social relations and cultural constructions on to material reality” (Watson, 2003, p. 149).

In becoming a representation of places and practices at a particular point in time, case-studies are crafted by researcher, and participant, decisions and choices of what is to be foregrounded and backgrounded, what is to be included and what is left out. Decisions are made that have implications for the generation and analysis of data and, ultimately, the meaningful, ethical and effective representation of the case.

Practice

Case study methodology provides an account of practice through which to explore, contextualise and theorise practice. In focusing the discussion on practice, I refer to practice theory relative to the loose collection of theories which attempt to understand the minutiae of everyday action and interaction (Anderson & Harrison, 2010; Green & Kemmis, 2009; Kemmis & Mutton, 2012; Kemmis & Smith, 2008; Schatzki, 1996, 2002; Schatzki et al., 2001; Thrift, 1996, 2008). In this sense then, practice theories attempt to both theorise and problematise the social by highlighting the “significance of theory and theorising” in understanding practice, but in turn reminding of the need to be suspicious of theory that attempts to “deliver general explanations of social life as it is” (Green, 2009, p. 1).

It is my contribution to ongoing conversations about case study that the generation of context-dependent knowledge of accounts of practice in case study embraces action and interaction as central to everyday intelligibility. Further, that a case represents accounts of complex practice to be studied analytically, bounded with/in spatial and temporal elements.

At its basis, practice theories have three core, inseparable, ideas: first, that practice offers an account of activity – it involves an actual ‘doing-ness’ and happening – that is grounded in what people say and do, and is dialogical, orchestrated and co-produced (Green, 2009). Second, that practice theory offers an account of practising; of bodily activities – ‘doings’ and ‘sayings’ – forming practices through their repetition and integration – and thus interconnected with ideas of habit, routine and habituation, and the formation of habitus. And third, that practice is performed, that it is bodily, physical, material and interactive, involving choreographies of bodies and material objects. Each of these ideas brings an integral understanding of the complex, open-ended and practised; of involving “‘arrays of activity’ in which the human body is the nexus” (Postill, 2010, p. 10).

A discussion of practice is therefore an account of the actions that constitute the everyday goings on in life, framed through time and space. Practices are performed through individual actions, yet collectively and historically constituted. Actions, which once performed cannot be undone, and instead re-form and transform practices:

Action and practice likewise ‘escape our control’ in a shared world and history. As they are ‘loosed upon the world’ (Yeats 1921,19), spiralling ‘out’ from us in space and ‘down’ through time, action and practice become things less and more and different than we intended, desired, anticipated, expected or hoped (Kemmis, 2010, p. 12).

Practice, therefore, is complex, and the research of practice must necessarily also encapsulate this complexity to avoid the loss to research that comes from unnecessary reduction of complexity. It is the diverse methods of data generation that are enabled through case study – interview, observation, document, survey, artwork, image and photographic representation – and through which provide an account of practice situated in time and space, contributing to the epistemological representation of practice. Such methods of data collection allow for the drawing together of multiple accounts and representations of activities, voices, creations, actions and interactions, of the carriers of practice in a site (Reckwitz, 2002). In turn, enabling an account of practice that is “caught up with and committed to the creation of affect, as contextual, and as inevitably technologised through language and objects” (Thrift & Dewsbury, 2000, p. 415).

Illustrations of case study as accounts of practice drawn from the broad field of education provide explicit focus on representations of in-the-moment actions and practices in a setting. For example, in the area of environmental and sustainability education, Kemmis and Mutton (2012) provide an investigation of exemplary practice in education for sustainability through ten case studies of formal and informal settings. Miles (2013) provides an account of teacher, student, and community actions and interactions to explore place-based environmental education in a small rural community, and Somerville and Green (2011, p. 14) discuss the findings from two studies of school place-based teaching to theorise an “enabling place pedagogy”. Further, the work of Comber, Nixon and Reid (2007) provide several case studies written with teacher co-researchers, about their involvement in the literacy and environmental communications initiative *Special Forever*. Although not exhaustive, the examples here are case studies that represent the complexity and multiplicity of practice.

Knowledge

In this way, case study provides a context through which to deepen understanding of specific practices and the opportunity to explore practices differently, given that “human behaviour cannot be meaningfully understood as simply ... rule-governed acts” (Flyvbjerg, 2001, p. 72). A further, important aspect of the insight that case study provides to practice is the opportunity to explore accounts of practice differently given the diversity of everyday experiences, knowledges and activities of participants in places. The thick descriptions and the comparability and transferability of conclusions between cases allows for the common, everyday form of “inference to the best explanation” (Thomas, 2010, p. 577).

The idea of looking to case study as a means through which to make “inference to the best explanation” aligns with a focus on practice and exemplary knowledge in case study that enables insight into the behaviours and the perceptions of participants in particular situations. Thomas (2010), and Flyvbjerg (2001, 2006), have both proposed that case study provides a description and an explanation of practical and experience-based knowledge, or *phrōnesis*. From an Aristotelian tradition, *phrōnesis* refers to practical knowing and judgement that is context-dependent, based on experience and developed through practice. Flyvbjerg (2001, p. 70) has described *phrōnesis* as “not concerned with universals only... [but] must also take cognizance of particulars, because it is concerned with conduct, and conduct has its sphere in particular circumstances”. Thomas (2010, p. 578) has described *phrōnesis* as “practical knowledge, craft knowledge, with a twist of judgement squeezed into the mix”. In turn, through understanding accounts of experience through the context of case study, along with connections that we make to our own experiences, we come to understand practices that inform these.

Understanding case study as based on *phrōnesis*, rather than a process of theory-generation, provides the opportunity to see that the meanings we make “are malleable and interpretable in the context of varieties of experience... [that] enables one to gather insight or understand a problem” (Thomas, 2010, p. 578). Exploring practices unique to a particular context provides a means through which to understand practice as well as understand multiple ways of practising. While the author crafts the case through decisions of what and how to generate and represent practice, further construction of the case occurs with the reader’s interpretation and understanding of what is reported, amidst the alignment of that case with their understanding of multitudinous other cases, both similar and dissimilar (Flyvbjerg, 2006).

Methodology and method

Undertaking case study necessitates methodological considerations that have implications for the data that are generated, the analysis and representation of data and, ultimately, in the reinterpretation of the representation by any reader.

While a case study is utilised in a move to understand specific contexts or phenomena that exist within the “messy complexity of human experience”, the case is still simply a case - not the phenomenon itself (Haas Dyson & Genishi, 2005, p. 3). Case study, therefore, is always a case “of something”. Yet, through the process of turning the “messy complexity of human experience” into that which is textual and mobile, it becomes an immutable mobile – a something that is transformed through becoming stable, yet also then transportable across places and times (Haas Dyson & Genishi, 2005, p. 3; Watson, 2003, p. 151).

Ontologically, case study research involves the research of something that is both pre-existing – that which the case study is investigating exists whether or not it is researched; it exists prior to being researched – as well as constructed through the researching of it (Flyvbjerg, 2001, 2006; Kemmis, 1980; Stake, 2000, 2003). Further to this, the object of a

case study is always indeterminate, and yet it is transformed from a “situation as an object of perplexity into an object of understanding” (Kemmis, 1980, p. 117). Thus, there is a transformation from the everyday actions and practices situated in place, to the immutable mobile of case study representation (Watson, 2003).

The phenomena or event investigated in a case study occurs in place as well as being a domain of practice. Thus, case study involves an inquiry into the practices of those who are present within the case. Seeing that practice is inseparable from those whose practice it is (Kemmis, 2010), case study provides an opportunity to become aware of the actions and practices of particular people or groups, within the situation or context of their happening (Reckwitz, 2002). Taylor (2013) contributes further to this by drawing on the relational work of Dorren Massey. When identifying what a case is – the tangible, concrete entity – Taylor draws attention to the non-living elements that constitute the bundle of trajectories in a place. Concomitant with Stake’s (1995) recognition of the complexity of a case, the bundle of trajectories in the place being represented through case study provides meaningful theoretical scope for recognition of the complexity of practice.

The elements of space and time, living, non-living and material ‘things’ interact and interplay through practices, to become necessarily reduced and bounded in their representation as case study. Yet case-studies of practice must be much more than a temporally bounded, holistic recount of “persons, events, decisions, periods, projects, policies, institutions or other systems” (Thomas, 2011, p.513) if they are to be considered as more than an undertheorised alternative to methodological rigour; existing within a “curious methodological limbo” (Gerring, 2004, p. 341). To avoid this, case study needs to demonstrate being a case of something, understood through an interpretive or analytical context – in other words, it is a case of something, explained analytically (Thomas, 2011).

Conclusion

Case study methodology and method provides an account of practices that pre-exists the arrival of the researcher and continues to exist after their departure. However, through its formation and re-formation, the case study becomes constrained by the spatial and temporal events and happenings of those places and times when the method of data generation is happening – the constructions of case-studies produce a ‘snapshot’ of the time, place and practices in the case site, filtered through the perspective of the researcher/s. This snapshot of time and place, produces “concrete, practical, and context-dependent knowledge” of real-life situations and practices, providing a methodological basis through which to generate an account of practice (Flyvbjerg, 2001, p. 70).

Through this discussion, I have drawn on theories of practice to build on conceptualisations of case study as a method and methodology in educational research. Here, I have argued, that case study needs to provide an account of something, explained analytically, which is temporally and spatially situated within its representation. Yet, at the same time, through its crafting a case study becomes an immutable mobile. As an account

of practice, explained analytically, case study is a valuable methodology for the research of educational practice, particularly given the scope for the representation of complex practice with multiple and bundled trajectories. Thus, while on the one hand the case attempts to represent complex practice; the case study is the analytical explanation, constructed and crafted to recount, analyse and generate, without reducing, new ways of understanding complex practices.

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