



## Case research in purchasing and supply management: Opportunities and challenges

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### A B S T R A C T

This paper examines the current state of application of qualitative methods, namely case studies in purchasing and supply management. We argue that the case study method has much to contribute to the development of the discipline namely in terms of theory development, providing strong exemplars as well as testing theories culled from other disciplines. In examining the use of the case method in purchasing and supply management, we suggest that there is a noticeable trend away from single case designs with sparse methodological reflections to multiple case, comparative designs accompanied by the use of conventional method justifications. These developments are broadly welcomed but we identify two blind spots: (1) the relative neglect of the links between theory and method and (2) the use of inappropriate statistical criteria to justify multiple case research designs. We discuss the nature of these problems using a number of examples and formulate rules for conducting good case research.

## Background

This paper discusses the use of qualitative research methods and particularly, case studies in purchasing and supply management. Our starting point is the well-entrenched quantitative–qualitative research distinction which has begun to resemble Snow's (1959) depiction of the breakdown of communication between the "two cultures", the humanities and the sciences. This irony is barely lost on these authors, mechanical engineers by background and well-drilled into the disciplines of quantification, but choosing to work in this subject area using mainly qualitative research approaches. This preference is heavily informed by a belief that social sciences deal with open systems, not easily amenable to be conceptualized in the same way as natural sciences whose objects of study can often be artificially controlled or produced, for example through laboratory experiments (Sayer, 1992). We are well-aware that the quantitative–qualitative divide. In addition, we do not wish to conclude with a plea for a hybrid or mixed methods alternative despite the increasing attention this topic is attracting (see Bryman, 2006). Instead, we want to focus on exploring associations between theory and method and avoiding inconsistent research aims (e.g. using qualitative methods but pursuing explanatory aims better suited to quantitative approaches). We follow Abbott's (2001) suggestion concerning the need for a close alignment between theories, explanations, methods, and research programs in ways that make them resonate with and support each other. In short, we strongly believe that methodological choices cannot be divorced from theoretical positions nor can theories be regarded as method-neutral. Ackroyd and Hughes (1992, p. 9) noted the increasing tendency for methods to be treated as independent of theory, as toolkits deployable to any set of research tasks. A brief look at the history of research methods reveals that the development of methods were often associated with

the development of theoretical approaches, e.g. the work of the arch-quantifier Paul Lazarsfeld at Columbia was influenced by particular conceptions of society and social science made in the image of the natural sciences. Abbott (2001, p. 189) argues that any methodology parses the social world in particular ways and thus contains elements of an implicit theory. Social surveys, for example, assume that collectivities can be studied by focusing on questioning randomly selected individuals and the analyst can subsequently move between levels of analysis without problems (Ackroyd and Hughes, 1992). As Abbott (1997, p. 1162) explains, surveys rely on decomposition and decontextualisation of social phenomena, which allows the production of data sets where contextual effects are reduced to interaction between variables and contextual causation deliberately minimized. By contrast, case researchers see cases as complex configurations of events and structures in situated spatial and temporal contexts, which preserve the integral character of social phenomena and which the analyst believes exhibits the operation of some identified theoretical principle (Mitchell, 1983; Ragin, 1997).

The two methodological approaches identified above contain very different implicit theories about the social world and imply a very different set of research tasks. Survey-based approaches assume social phenomena are decomposable in smaller units and measurable. Methodological tasks focus on appropriate ways to parse the social world, specify variable properties and measurement strategies as a precursor to the use of quantitative data analysis techniques. Case-based approaches have different concerns. There are no ready-made ways to parse the social world. The task of the analyst is to progressively construct the context and boundaries of the phenomena under investigation, as theory interacts with methodological decisions and empirical observations. The research object, its boundaries and context are often emergent outcomes of the research process.

Our focus in this paper will be on the use of the case study method in purchasing and supply management, in light of recent debates in the social sciences (see, e.g. George and Bennett, 2005) and management studies (see, e.g. Dubois and Araujo, 2004; Ahrens and Chapman, 2006) regarding qualitative methods. In particular, we want to examine how the case study method has been put to use and what justifications have been advanced for its use within the literature. The structure of this paper is as follows: in Section 2, we will discuss the relationship between theory and method in case research. In Section 3, we will reflect on some of the problems and pitfalls associated with the use of the case study method in a number of examples culled from the purchasing and supply management literature. In Section 4 we will discuss five rules of good practice in using the case method and in the final section we derive some implications of our arguments for the practice of case research.

## **Literature Review**

The first observation we can offer is that the literature does not abound with examples of papers explicitly addressing methodological issues (for an exception see Ramsay, 1998). Looking at the case-based papers published in this journal, some developments are striking.<sup>1</sup> During the early years (1994–1999), we found a number of case-based papers that relied on single in-depth study to illustrate strategic or key aspects of purchasing and supply management (see e.g. Juga, 1994; Burnes and New, 1996; Harland, 1996; Wolters and Schuller, 1997; Roberts and Mackay, 1998; Caddick and Dale, 1998; Holmström, 1998). In most of these papers there were no method references or methodological aspects addressed in detail.

In the more recent past, case-based papers have substantially changed. First, comparative multiple case studies have become the dominant approach (see e.g. Quintens et al., 2005; Fernandez and Keka'le, 2005; Ra'bade and Alfaro, 2006; Tatsis et al., 2006; Howard et al.,

2006; Camuffo et al., 2006). Secondly, papers have progressively focused on more specific aspects of purchasing and supply management. Thirdly, a more standardized methodological approach is emerging with a number of method sources being frequently cited and used. Among the most popular references are general social science and management sources, namely Eisenhardt (1989), Glaser and Strauss (1967), Miles and Huberman (1994), Yin (2003), as well as sources often cited in the cognate discipline of operations management, e.g. Meredith (1998) and Voss et al. (2002). We might be tempted to suggest a Kuhnian explanation to this development, i.e. the field is maturing and explorative approaches are being superseded by more elaborate and sound methodological approaches. Another equally plausible explanation is that researchers in this area, acting both as authors and reviewers, are progressively constructing standard ways for doing research and justifying methodological choices. As we alluded to earlier, methodological approaches in purchasing and supply management have been heavily influenced by debates elsewhere. As mentioned earlier, there appears to be a convergence towards some methodological standards as far as case studies in purchasing and supply management are concerned. Eisenhardt's (1989) often quoted approach to building theory from multiple case studies have, in recent years, become extensively used in the field. Eisenhardt's approach to case studies exemplifies many of the problems associated with conducting research on a qualitative tradition whilst relying on validation criteria more appropriate for quantitative methodologies. The critique against these inconsistencies can be divided in two categories. First, Dyer and Wilkins (1991, p. 613) contrast the multiple case research approach advocated by Eisenhardt with (single) case stories: it delivers almost ready-to-test hypotheses based on rich qualitative insights about the cases, but it focuses so much on the constructs developed and their measurability that we often miss the context, the rich background of each case. As a result, we fear that this form of case research will not create an exemplar, that is, a story against which researchers can compare their experiences and gain rich theoretical insights.

Secondly, Eisenhardt can also be taken to task on how and why multiple case studies should be carried out. The nub of Eisenhardt's (1991, p. 627) argument is that "...good theory is fundamental the result of rigorous methodology and comparative, multiple-case logic". For multiple cases, read "a number between 4 and 10 cases", because "with fewer than 4 cases, it is often difficult to generate theory with much complexity", and "with more than 10 cases, it becomes difficult to cope with the complexity and volume of the data" (Eisenhardt, 1989, p. 545). Lewis (1998, p. 462) seems far less concerned than Eisenhardt about the challenges of dealing with voluminous qualitative data sets: "With less information per existing case and a desire to increase case diversity, 20–30 cases may be more appropriate for iterative triangulation". As Easton (1998) notes, even enthusiastic case researchers fail to appreciate the differences between the logics of statistical and analytical generalizations. In qualitative research, it is common for researchers to define the scope of their theories narrowly and propose generalizations that rely "...not on the typicality or representativeness of the case but upon the cogency of the theoretical reasoning" Mitchell (1983, p. 207). Qualitative analysis assumes that causal heterogeneity is the norm for large populations (Ragin, 2000; Mahoney and Goertz, 2006). In case research, the different aspects of a case are understood in relation to one another in a coherent whole or configuration, rather than modular assemblages of variables. Ragin (2000) remarks that case-oriented researchers do not start with samples drawn from pre-constituted populations. Instead, they begin with a few orienting concepts and cases. But cases have fuzzy boundaries, concepts may only have case-specific meanings and the approach allows for or even thrives on case transformation as the research process unfolds (Abbott, 2001). By contrast, in the quantitative tradition, cases are instances in a uniform and largely undifferentiated population—most statistical techniques require a large number of observations. But whereas in qualitative

studies there is a focus on explaining the intricacies of each case, in quantitative research an adequate explanation at the population level does not require that each case is explained and minor independent variables can be omitted for the sake of more general statements at the population level (Mahoney and Goertz, 2006, p. 238).

### ***Examples of case research practice***

Multiple case designs pose a number of challenges to researchers and illustrate a variety of problems related to research design and method justification. Three examples culled from the purchasing and supply literature illustrate some of these problems. The first example is Howard et al.'s (2006) study focuses on whether automotive supplier parks are an imperative for build-to-order (BTO) manufacturing. The study is based on 8 supplier parks categorized as either having a potential to enable BTO or not. The analysis focuses on two dimensions: (1) supplier park proximity (measured as physical distance) and (2) strategic BTO flexibility (measured as 'drivers': no driver, volume or product mix, volume and product mix). A matrix illustrating the position of the 8 cases in these two dimensions and the size of the supplier parks is followed by this conclusion:

The analysis demonstrates that large-scale parks that enable BTO are associated with being 'distant' (more than 1 km) from the OEM assembly park. Supplier parks that are geographically distant offer greater opportunity for expansion than onsite or adjacent parks, and hence are more flexible. These parks are driven by both volume and product mix flexibility, and combine several moderating factors which enable BTO. (Howard et al., 2006, p.100.) The authors apply the same kind of deductive logic appropriate for large-scale surveys arguing that since covariance was identified among some of the selected variables there is proof of an association. The same results could instead have been described and discussed as an instance of "small-N", comparative research (Ragin, 2000). Using a multiple, comparative case logic the analysis would not have dealt with each case as independent observation, but instead would have tried to explain the causal paths that produced a particular outcome for each case.

This would have enabled the researchers to achieve a degree of analytical generalizations rather than seek a quasi-statistical generalization. The case research logic relies on finding causal relationships within each case rather than by selecting, measuring and comparing a number of attributes on each case. A second example is provided by A° hlstro¨m and Nordin's (2006) recent study on establishing relationships with service suppliers. The case selection turned around identifying and understanding the problems that are specific to service supply relationships, and thus not to buyer-supplier relationships in general. Through a number of interviews the authors identify four problem areas:

- (1) writing agreements for service exchanges;
- (2) defining service processes;
- (3) handling over service delivery to suppliers; and

(4) controlling the relationship with the end-customer (the services acquired are added to the products of the customers in its exchange with end-customers). All four problem areas are described empirically, illustrated by quotes from the interviews, and the suggested findings and explanations are related to previous research through extensive grounding in the literature. The choice of a research site was a company selling high technology products to business customers where the company was undergoing a radical transformation, from in-house activities associated

with developing, manufacturing and servicing the products towards outsourcing noncore activities to external partners. The judicious choice of research site provided the researchers with the opportunity to investigate their two research questions in a variety of service settings. One single case design led to eleven embedded cases (Yin, 2003) providing a comparison between services provided by the focal company and services where supply relationships were established. Defining the embedded cases as projects where a company attempts to outsource a service to an external partner as part of the offering to the final customer, introduces further variation into the study—i.e. services that are provided internally and were not the object of outsourcing attempts, services that are provided internally despite attempts to outsource them and services that were successfully outsourced.

This study is undoubtedly an example of good practice in case research and our quibbles relate only to how the choice of method was described and justified. First, the authors use the following standard argument as to why an exploratory case study was needed: Research into problem areas encountered when establishing service supply chains is scarce, which makes case studies an appropriate choice, since they suit questions which are not thoroughly researched (Leonard-Barton, 1990; McCutcheon and Meredith, 1993, p. 79)". Either this argument is generic, suggesting that case studies are intrinsically exploratory, or it suggests that if the problem had already been studied, another choice of method would have been suitable. Furthermore, the exploratory nature of the research is used as a motive for the choice to interview a broad spectrum of people with regard to their roles within the company and their experiences. The use of multiple respondents, however, appears to be a wise choice in order to capture variety of perceptions and meanings, which could be seen as vital to understand complex business relationships.

Secondly, the authors argue that although the research was conducted within one company it contains eleven cases. These cases are defined as projects "...where a manufacturing company establishes (or attempts to establish) a relationship with an outside company in order to provide services as part of the offering to the final customer" (McCutcheon and Meredith, 1993, p. 79). One might argue that a single case design with multiple embedded cases strengthens the study. Emphasizing the number of embedded cases rather than the single case design may have more to do with the concern for showing variation in the design rather than justifying why single case with multiple embedded sub-cases was a good methodological choice. Thirdly, the data analysis process is described in detail. It is supported by lists, coding and computer-based text analysis. When the four service supply specific problem areas had been identified, a simple frequency count was used to identify the number of times a problem was mentioned during the interviews. These frequency counts were used as a supplement to the more qualitative impressions: "y since counting enables researchers to remove nagging doubts about the accuracy of their impressions about the data (Silverman, 1993)". (A° hlstro¨m and Nordin 2006, p. 81). When moving on to presenting the identified problem areas the authors do not present the empirical material, or refer to it as "a case" but as "illustrative excerpts" whose main purpose are to introduce the reader into how the conclusions were reached and to facilitate the reader's familiarization with the data. We might argue that the quality of a case study is predicated on whether the case, together with the suggested theoretical contribution, manages to persuade the reader or not. This is hard to achieve if the case is presented as a series of fragmented narratives.

Our third example is Ha°kansson and Eriksson's (1993) study on innovation in supplier networks based on three studies: one cross-sectional survey of 123 small and medium sized

Swedish manufacturing companies, and two single case studies on how two focal companies, respectively combine a set of suppliers in the technical development process. The cross-sectional survey led to the following conclusions (Håkansson and Eriksson's, 1993, p. 16): We have concluded that technical collaboration, leading to improvement and innovation, is likely to take place within relationships with some specific features. Accordingly, the innovativeness of a relationship is hypothesized to be related to the parties' ability to create these conditions. However, efficiency is also affected by factors external to the focal relationship.

The notion that efficiency in one relationship should not be seen in isolation but that as dependent on other relationships provides a platform for introducing the two case studies "...describing development projects where the buying company tries to systematically combine a set of suppliers in the technical development process" (Håkansson and Eriksson, 1993, p. 16). The first case concerns the development of a system used by the pharmaceutical industry for the purification of raw materials. This project aimed at standardizing this system and producing it in batches instead of highly customized single units. This also meant that instead of using 80% standardized components, suppliers were asked to develop adapted solutions to make them fit better with the new system. Eventually, the system solution contained only 20% standardized components while the rest were specifically adapted. This change introduced a number of challenges in the buyer-supplier relationships and the relationships between suppliers, who had to cooperate amongst themselves in order to adjust their components to each other. The second case focused on the development of a new system for inspection of underwater steel constructions and consisted of a number of actors specializing in different sub-systems such as navigation and observation, measurement, presentation and documentation, robot systems and communication systems. All these actors were also involved in other application areas and the case concludes that: "...the project network was not strong enough in relation to the 'off-shore network' as a whole to be able to mobilize the latter" (Håkansson and Eriksson, 1993, p. 25).

The analysis of the two cases relies on four key issues regarding the handling of technical development processes in companies: prioritizing, synchronizing, timing, and mobilizing. These issues were introduced prior to the description of the empirical studies. The discussion of the four issues used examples from one or both single cases in combination with the output of the cross-sectional survey. The two cases sometimes illustrate the same argument while in other instances, they display a degree of variety along the same dimension. This variation, in turn, is explored to identify categories of timing problems—e.g. timing within the company, timing within a relationship, timing among relationships in relation to each other, and timing from a mobilization point of view. Håkansson and Eriksson (1993) constitutes a good example of how case research can be deployed to serve a variety of purposes. In this study, single cases are described in a way that preserves their unique character while their use in cross-case analysis does not violate their within-case integrity. The narrative weaves rich empirical material into a theoretical discussion that in turn, is enriched and expanded through the use the examples culled from the survey and the cases. A detailed description of methods or the casing procedures used are not explicitly addressed in this paper. However, this study provides a useful example of a mixed approach, where the move from a extensive, cross-sectional survey to the intensive case studies is accompanied by a shift from the individual company perspective on dyadic relationships, to a network perspective focusing on the role of supplier networks in innovation. In conclusion, these three examples illustrate some of the opportunities and challenges of doing case research. Howard et al. (2006) show how opportunities for comparative case research can be missed for the sake of complying with quasi-statistical epistemological criteria. A° hlstro°m and Nordin (2006) provide an example of an ingenious research design using a single case with multiple

embedded cases but where the justification of methodological procedures tends to obscure the integrity of the single case. Ha°kansson and Eriksson (1993) provide few methodological justifications but illustrate how the combination of survey data, single case description and cross-case comparisons, together with a shift in the unit of analysis, provides both a rich description of empirical material and a clear theoretical contribution. These examples pave the way for our shift in assessing the current status of case research in purchasing and supply management to normative guidelines on how to conduct case research.

## Materials and Methods

As far as purchasing and supply management is concerned, there is no consensus on the main theoretical assumptions of the field. Most studies employ a variety of theoretical approaches such as the resource based view (Ramsay, 2001) or the industrial network approach (Gadde and Ha°kansson, 2001). The relationship between theory development and methods should be of some concern. The absence of well-established theoretical frameworks is an obstacle to debate on the methodological front, and adopting theory-infused, off-the-shelf methods risks sacrificing theory development on the altar of methodological rigor. Ramsay (2001) examines the resource-based view (RBV) as a possible "natural home" for purchasing and supply management. However, he questions whether purchasing can be regarded as strategic through the RBV prism since no sustainable competitive advantage can be generated through activities related to purchasing and supply. Mol (2003) argues from an opposite vantage point, by stressing that the RBV recognizes that purchasing can indeed be strategic and that borrowing of theories from more established fields "...could be a solution for purchasing management research" (Mol (2003, p. 7).

The exchange between Ramsay and Mol exposes the interdependence between theory and method. Assuming for the sake of argument that the RBV is indeed an appropriate umbrella for purchasing management research, what methodological implications follow? Gibbert (2006) suggests that since firm-idiosyncratic resources are at the very heart of the RBV, it would be inconsistent to strive towards generalizable research findings. He elaborates on this apparent paradox (Gibbert, 2006, 131): ...the acid test for resource idiosyncrasy would be the lack of generalizability of research findings irrespective of a research methodology's propensity to produce generalizable findings. Gibbert concludes that the paradox of idiosyncratic resources and generalizable research findings might provide a dual service to researchers. First, it reminds us of the hierarchical relationship between the three types of validity (internal–construct–external), and secondly, it forces informed decisions on when to deemphasize generalizability as the third criterion of validity. An assumption of resource heterogeneity would make suggestions of generalizing research findings inconsistent with this basic assumption. Rouse and Daellenbach (1999) had earlier argued that since the focus in the RBV shifted from environmental factors to idiosyncratic resources, methods should shift from research on organizations to research in organizations. While research on organizations is associated with large-sample, multi-industry, single-time-period samples, research in organizations requires thick descriptions, direct or participant-observation derived data, and in-depth, longitudinal approaches. Easton (1998) provides another example of theory method links as far as the study of business relationships and networks is concerned. For example, surveying networks as samples of independent actors or dyads is a non-starter. Studying relationships as complex layers of actors, resources and activity links across organizational boundaries dictates the need to collect multiple forms of data on both sides of the dyad that cannot be easily standardized or aggregated. In the cognate field of operations management, Wacker (1998) argues against the dangers of getting stuck in one methodological approach. After assessing and classifying the predominant research methodology

in over 2000 articles published over a 5 year period, Wacker (1998, p. 361) found that only 8% were case based. He concluded

The analytical mathematical research methodology is by far the most popular methodology and appears to be over-researched. On the other hand, the integrative research areas of analytical statistical and the establishment of causal relationships are under-researched. This leads to the conclusion that theory-building in operations management is not developing evenly across all methodologies.

Wacker (1998) argues that there are several reasons why theory is important: (1) it provides a framework for analysis; (2) it provides an efficient method for field development; and (3) it provides clear explanations for the pragmatic world. He also emphasizes the importance of focusing the research on the 'right' kind of phenomena to develop theory: "unless operations management research addresses relevant practical problems to explain complex phenomena, it cannot develop into a theory building discipline" (Wacker, 1998, p. 362). As far as case studies in operations management are concerned, Stuart et al. (2002, pp. 421–422) argue that "Case studies should not be seen as a methodology appropriate only for understanding and the preliminary stages of theory development. Because of their observational richness they also provide a means of refutation of, or extensions to, existing concepts". Furthermore, they suggest that a powerful way to consider the value of cases is by taking a "customer focused approach" to the issue (Stuart et al., 2002, p. 431): ...we could ask which would be more powerful, influential, and useful contribution to both management practice and theory development:

- Knowing that the correlation between perceptions of quality practices and perceptions of performance was computed to 0.2 which is ninety-something percent likely to be significantly different from zero.
- Knowing exactly how Harley Davidson turned around their performance using quality methods that achieved certain outcomes that are revealed through a detailed case study via interviews and through observations of multiple members of the organizations, capturing the richness of their views based on their differing roles in the company.

Stuart et al. (2002) is as much an argument for case studies as it is an argument for the role of strong exemplars in the development of a new discipline. Kuhn (1970, p. 43) observed that novice apprentices need: a set of recurrent and quasi-standard illustrations of various theories in their conceptual, observational, and instrumental applications. These are the community's paradigms, revealed in its textbooks, lectures, and laboratory exercises. By studying them and by practicing with them, the members of the corresponding community learn their trade. Similarly, the physicist Ziman (1978, p. 6) recognizes that scientific communication is fruitless unless it is framed within the recognizable and reproducible events that fit the experience of individual scientists. This explains the primary role of controlled observation and experiment in science. What makes communication and intersubjective consensus possible is not simply the mathematical formulae or instrument readings but the innate human ability for pattern recognition which allows scientists to become aware of particular features of experience and transfer images across contexts (Ziman, 1978, p. 7). In the social sciences, where recourse to controlled observation or experiment is limited, much of what we know derives from classic case studies and standard interpretations of these cases (Dyer and Wilkins, 1991; Walton, 1992). This does not amount to saying that current interpretations of classic cases should be regarded as definitive. As Walton (1992, p. 135) remarks, what constitutes an acceptable interpretation at a given time will be decided by the particular research communities using its own, favorite



conceptual lenses. The value of classical cases is often that they "...continue to provide the material for new interpretations—to provide a case of many things depending on the vigor of new theories" (Walton 1992, p. 135). An example of the value of a Kuhnian exemplar as a fulcrum for alternative interpretations involving both the empirical facts described in case as well as the standard interpretation is the merger between Fisher Body with General Motors in 1926 (Klein et al., 1978). The received view is that vertical integration was determined by the possibility of opportunistic behavior and hold-up, as attested by the numerous citations of the case in textbooks on industrial organization and the economics of strategy. But, in recent years, the details as well as the interpretation of this paradigmatic case have been re-examined (see Casadesus-Masanell and Spulber, 2000; Coase 2000, 2006; Freeland, 2000; Helper et al., 2000). The re-examination of the historical material conclude that there was little or no evidence that Fisher Body behaved opportunistically or that General Motors advanced with the merger because of fears over a hold-up. Helper et al. (2000) offer a radical reinterpretation of the facts in this case. In the 1920s and 1930s, US car assemblers were more concerned with establishing collaborative relationships with their suppliers rather than preventing hold-ups through vertical integration. The merger with Fisher Body was, from General Motor's perspective, an attempt to bring the Fisher Brothers' expertise in building a collaborative system of supply within General Motors. Helper et al. (2000, p. 459) conclude: "instead of buying Fisher Body because they did not trust the Fisher Brothers, GM bought Fisher Body because they trusted the Fisher Brothers so much that they wanted them intimately involved in managing all of GM's assets". In short, the standard interpretation is turned on its head and the classic exemplar of vertical integration induced by fear of hold-up is questioned. This does not prevent those who advocate that fear of hold-ups is the main cause of vertical integration from continuing to rely on the Klein et al. (1978) interpretation, but it opens up the same case to a set of new interpretations based on alternative theories of vertical integration.

The preceding discussion highlighted the close connection between theories and methods in the social sciences. Abbott (2001) suggested that even though methods may initially be seen as tools for theory development and testing, they also shape theoretical thinking because of their inevitable assumptions about the social world. At the heart of the theory–method link is whether theories and methods resonate with and support each other, or do their combination produces strains, stresses and incoherence? As we pointed out in the case of RBV, mixing theoretical assumptions of heterogeneous and idiosyncratic combinations of resources as conferring uniqueness and competitive advantage to individual firms does not fit with methodologies that rely on homogeneity, decomposition of wholes into discrete parts, additive effects of individual variables and generalizability as an epistemological test.

The second argument we advanced in this section relates to classic case studies as strong disciplinary exemplars. We noted that pattern recognition and the role of exemplars is important in both the natural and social sciences. But, if interpretations often persist unchallenged for decades as the GM–Fisher Body merger case exemplifies, there is no reason why we should regard exemplars as beyond reinterpretation. The value of an exemplar for a discipline is not fixed once and for all, but will change as new questions are put to old cases and new interpretations based on new theoretical frameworks emerge. We regard strong exemplars as both necessary for the development of a discipline as well as providing templates against which different theoretical and methodological positions may sharpen their differences.

## Conclusion

This paper has examined the current state of the use of qualitative methods, in particular case studies, in the purchasing and supply management field. More specifically, we have examined the relationship between theory and method and the contrasting logics underpinning qualitative and quantitative research. As a result of our survey of the field, we proposed a number of case method rules that encapsulate our beliefs regarding good practice in the conduct of case study research.

Our concluding argument is not to advocate a mixed methods approach or suggest a better balance between quantitative and qualitative methodologies. Rather than focus on the divide between qualitative and quantitative methods, we argue that it is more productive to consider the nexus between theory and method and ask more pertinent questions about how a field can advance through the pursuit of theoretical and methodological agendas as well as improving the connections between theory and method.

We suggested earlier that disciplines can benefit from the development of strong exemplars and suggested that case studies can often serve that purpose, acting as a reference points for theory development as well as classic instances of particular phenomena. We argued that case studies should not be seen simply as inductive tools, an advance column marching ahead of the larger armies of quantitative researchers. Cases can also serve as important complements to quantitative research, testing theories in concrete instances and helping to refine their scope of applicability.

Our advocacy of cases studies method revolves around the strong theory–data connection that underpins this method. The selection of cases and the very process of declaring “what a case is” are driven by theoretical aims and criteria. Theory is intimately involved in the process of “casing” (Ragin, 1992a, b), bringing closure to the relationship between theoretical concepts and empirical evidence. This is not to say that the strong theory–methods connection is the sole preserve of case research but it is especially strong and transparent in good case research. A neglect of the theory–method link smuggles in its own set of problems and challenges. Researchers selecting methods without due attention to their implicit assumptions and coherence with theoretical aims risk incoherent conclusions or falling into the trap of brute empiricism.

In conclusion, we need further variety in theoretical agendas and the appropriate methods to support the development of those agendas in purchasing and supply management research. Our plea is that researchers, both quantitative and qualitative, contemplate theoretical and methodological developments in tandem, rather than seeing theoretical development as a self-contained endeavor or methods as neutral tools at the service of theory development and testing.

## Reference List

- Abbott, A., 1997. Of time and space: The contemporary relevance of the Chicago School. *Social Forces* 75 (4), 1149–1182. Abbott, A., 2001. *Time Matters. On Theory and Method*. The University of Chicago Press, Chicago.
- Ackroyd, S., Hughes, J., 1992. *Data Collection in Context*. Longman, London.
- Ahlstrom, P., Nordin, F., 2006. Problems of establishing service supply relationships: evidence from a high-tech manufacturing company. *Journal of Purchasing and Supply Management* 12 (2), 75–89.

- Ahrens, T., Chapman, C.S., 2006. Doing qualitative field research in management accounting: positioning data to contribute to theory. *Accounting, Organizations and Society* 31 (8), 819–841.
- A. Dubois, L. Araujo / *Journal of Purchasing & Supply Management* 13 (2007) 170–181
- Bryman, A. (Ed.), 2006. *Mixed Methods*. Sage, London.
- Burnes, B., New, S., 1996. Understanding supply chain improvement. *European Journal of Purchasing and Supply Management* 2 (1), 21–30.
- Caddick, R.J., Dale, B.G., 1998. The impact of total quality management on the purchasing function: influences and implications. *European Journal of Purchasing and Supply Management* 4 (2–3), 133–142.
- Camuffo, A., Furlan, A., Romano, P., Vinelli, A., 2006. The process of supply network internationalisation. *Journal of Purchasing and Supply Management* 13 (2), 135–147.
- Casadesus-Masanell, R., Spulber, D.F., 2000. The fable of Fisher Body. *Journal of Law and Economics* 43 (1), 67–104.
- Coase, R.H., 2000. The acquisition of Fisher Body by General Motors. *Journal of Law and Economics* 43 (1), 15–31.
- Coase, R., 2006. The conduct of economics: the example of Fisher Body and General Motors. *Journal of Economics and Management Strategy* 15 (2), 255–278.
- Dubois, A., Araujo, L., 2004. Research methods in industrial marketing studies. In: Ha°kansson, H., Harrison, D., Waluszewski, A. (Eds.), *Rethinking Marketing. Developing a New Understanding of Markets*. Wiley, Chichester, pp. 207–228.
- Dubois, A., Gadde, L.E., 2002. Systematic combining: an abductive approach to case research. *Journal of Business Research* 55 (7), 553–560.
- Dyer, W.G., Wilkins, A.L., 1991. Better stories, not better constructs, to generate better theory: a rejoinder to Eisenhardt. *Academy of Management Review* 16 (3), 613–619.
- Easton, G., 1998. Case research as a methodology for industrial networks: a realist apologia. In: Naude ´, P., Turnbull, P. (Eds.), *Network Dynamics in International Marketing*. Pergamon, Oxford, pp. 73–87.
- Eckstein, H., 1975. Case study and theory in political science. In: Greenstein, F.J., Polsby, N.W. (Eds.), *Handbook of Political Science*, vol. 7. Addison-Wesley, Reading, MA, pp. 79–137.
- Eisenhardt, K.M., 1989. Building theories from case study research. *Academy of Management Review* 14 (4), 532–550.
- Eisenhardt, K.M., 1991. Better stories and better constructs: the case for rigor and comparative logic. *Academy of Management Review* 16 (3), 620–627.
- Eisenhardt, K.M., Graebner, M.E., 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal* 50 (1), 25–32.
- Fernandez, I., Keka¨le, T., 2005. The influence of modularity and industry clockspeed on reverse logistics strategy: implications for the purchasing function. *Journal of Purchasing and Supply Management* 11 (4), 193–205.
- Flyvbjerg, B., 2006. Five misunderstandings about case-study research. *Qualitative Inquiry* 12 (2), 219–245.
- Freeland, R.F., 2000. Creating holdup through vertical integration: Fisher Body revisited. *Journal of Law and Economics* 43 (1), 33–66.

- Gadde, L.-E., Ha°kansson, H., 2001. *Supply Network Strategies*. Wiley, Chichester. George, A.L., Bennett, A., 2005. *Case Studies and Theory Development in the Social Sciences*. The MIT Press, Cambridge, MA.
- Gephart, R.P., 2004. Qualitative research and the academy of management journal. *Academy of Management Journal* 47 (4), 454–462.
- Gerring, J., 2004. What is a case study and what is it good for? *American Political Science Review* 98 (2), 341–354.
- Gibbert, M., 2006. Generalizing about uniqueness. an essay on an apparent paradox in the resource-based view. *Journal of Management Inquiry* 15 (2), 124–134.
- Giddens, A., 1984. *The Constitution of Society*. Polity, Cambridge. Glaser, B.G., Strauss, A.L., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine, Chicago.
- Ha°kansson, H., Eriksson, A.-K., 1993. Getting innovations out of supplier networks. *Journal of Business-to-Business Marketing* 1 (3), 3–34.
- Harland, C., 1996. Supply network strategies the case of health supplies. *European Journal of Purchasing and Supply Management* 2 (4), 183–192.
- Helper, S., MacDuffie, J.P., Sabel, C., 2000. Pragmatic collaborations: advancing knowledge while controlling opportunism. *Industrial and Corporate Change* 9 (3), 443–488.
- Holmström, J., 1998. Business process innovation in the supply chain—a case study of implementing vendor managed inventory. *European Journal of Purchasing and Supply Management* 4 (2–3), 127–131.
- Howard, M., Miemczyk, J., Graves, A., 2006. Automotive supplier parks: an imperative for build-to-order? *Journal of Purchasing and Supply Management* 12 (2), 91–104.
- Juga, J., 1994. Organizing for order-based logistics. *European Journal of Purchasing and Supply Management* 1 (3), 181–190.
- Kay, N.M., 1997. *Pattern in Corporate Evolution*. Oxford University Press, Oxford. Klein, B., Crawford, R.G.,
- Alchian, A., 1978. Vertical integration, appropriable rents and the competitive contracting process. *Journal of Law and Economics* 21 (2), 297–326.
- Kuhn, T.S., 1970. *The Structure of Scientific Revolutions*. Chicago University Press, Chicago.
- Leonard-Barton, D., 1990. A dual methodology for case studies: synergistic use of a longitudinal single site with replicated multiple sites. *Organization Science* 1 (3), 248–266.
- Lewis, M.W., 1998. Iterative triangulation: a theory development process using existing case studies. *Journal of Operations Management* 16 (4), 455–469.
- Mahoney, J., Goertz, G., 2006. A tale of two cultures: contrasting quantitative and qualitative research. *Political Analysis* 14 (3), 227–249.
- McCutcheon, D.M., Meredith, J.R., 1993. Conducting case study research in operations management. *Journal of Operations Management* 11 (3), 239–256.
- McKeown, T.J., 1999. Case studies and the statistical worldview. *International Organization* 53 (1), 161–190.
- Meredith, J., 1998. Building operations management theory through case and field research. *Journal of Operations Management* 16 (4), 441–454.

- Miles, M.B., Huberman, A.M., 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Sage, Thousand Oaks, CA.
- Mitchell, J.C., 1983. Case and situation analysis. *The Sociological Review* 31 (2), 187–211. Mol, M.J., 2003. Purchasing's strategic relevance. *Journal of Purchasing and Supply Management* 9 (1), 43–50.
- Patton, M.Q., 1990. *Qualitative Evaluation and Research Methods*. Sage, Thousand Oaks, CA.
- Popper, K., 1963. *Conjectures and Refutations, The Growth of Scientific Knowledge*. Routledge and Kegan Paul, London.
- Quintens, L., Matthyssens, P., Faes, W., 2005. Purchasing internationalisation on both sides of the Atlantic. *Journal of Purchasing and Supply Management* 11 (2-3), 57–71.
- Ra' bade, L.A., Alfaro, J.A., 2006. Buyer–supplier relationship's influence on traceability implementation in the vegetable industry. *Journal of Purchasing and Supply Management* 12 (1), 39–50.
- Ragin, C.C., 1992a. In: Ragin, C.C., Becker, H.S. (Eds.), Introduction : Cases of "What is a Case?" in *What is a Case? Exploring the Foundations of Social Inquiry*. Cambridge University Press, Cambridge, pp. 1–18.
- Ragin, C.C., 1992b. In: Ragin, C.C., Becker, H.S. (Eds.), "Casing" and the Process of Social Inquiry, in *What is a Case? Exploring the Foundations of Social Inquiry*. Cambridge University Press, Cambridge, pp. 217–226.
- Ragin, C.C., 1997. Turning the tables: how case-oriented research challenges variable-oriented research. In: Brochmann, G., Engelstad, F., Kalleberg, R., Leira, A., Mjøset, L. (Eds.), *Methodological Issues in Comparative Social Science*, vol.16. JAI Press, Greenwich, CT, pp. 27–42.
- Ragin, C.C., 2000. *Fuzzy Set Social Science*. The University of Chicago Press, Chicago.
- Ramsay, J., 1998. Problems with empiricism and the philosophy of science: implications for purchasing research. *European Journal of Purchasing and Supply Management* 4 (2–3), 163–173. ARTICLE IN PRESS 180
- Dubois, L. Araujo / *Journal of Purchasing & Supply Management* 13 (2007) 170–181
- Ramsay, J., 2001. Purchasing's strategic irrelevance. *European Journal of Purchasing and Supply Management* 7 (4), 257–263.
- Roberts, B., Mackay, M., 1998. IT supporting supplier relationships: the role of electronic commerce. *European Journal of Purchasing and Supply Management* 4 (2–3), 175–184.
- Rouse, M., Daellenbach, U., 1999. Rethinking research methods for the resource-based perspective. *Strategic Management Journal* 20 (5), 487–494.
- Sayer, A., 1992. *Method in Social Science. A Realist Approach*. Routledge, London.
- Siggelkow, N., 2007. Persuasion with case studies. *Academy of Management Journal* 50 (1), 20–24.
- Snow, C.P., 1959. *The Two Cultures and the Scientific Revolution*. Cambridge University Press, New York.
- Stuart, I., McCutcheon, D., Handfield, R., McLachlin, R., Samson, D., 2002. Effective case research in operations management: a process perspective. *Journal of Operations Management* 20 (5), 419–433.

- Tatsis, V., Mena, C., van Wassenhove, L., Whicker, L., 2006. E-procurement in the Greek food and drink industry: drivers and impediments. *Journal of Purchasing and Supply Management* 12 (2), 63–74.
- Voss, C., Tsiriktsis, N., Frolich, M., 2002. Case research in operations management. *International Journal of Operations and Production Management* 22 (2), 195–219.
- Wacker, J.G., 1998. A definition of theory: research guidelines for different theory-building research methods in operations management. *Journal of Operations Management* 16 (4), 361–385.
- Walker, H.A., Cohen, B.P., 1985. Scope statements: imperatives for evaluating theory. *American Sociological Review* 50 (3), 288–301.
- Walton, J., 1992. Making the theoretical case. In: Ragin, C.C., Becker, H.S. (Eds.), *What is a Case ? Exploring the Foundations of Social Inquiry*. Cambridge University Press, Cambridge, pp. 121–138.
- Wolters, H., Schuller, F., 1997. Explaining supplier-buyer partnerships: a dynamic game theory approach. *European Journal of Purchasing and Supply Management* 3 (3), 155–164.
- Yin, R.K., 2003. *Case Study Research: Design and Methods*. Sage, London.
- Ziman, J., 1978. *Reliable Knowledge. An Exploration of the Grounds for Belief in Science*. Cambridge University Press, Cambridge.