

## **Missing Questions, Missing Answers: What can the fields of operations and supply management learn through further qualitative inquiry?**

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The intertwined academic fields of operations and supply chain management (OSM) are believed to yield scholarly and managerial benefit to society through rigorous empirical and analytical examinations of OSM phenomena. Indeed, the *Journal of Operations Management [JOM]* states as its explicit mission the advancement of the OSM field through “high quality...empirical research,” while a number of other established and respected outlets in the broad OSM field provide forums for similar advancements through the use of econometric or other analytical modeling techniques. As discussed in a previous OSM Forum Essay (#2, by Carter, Sanders, and Dong, May 2008) and its resulting commentary, the ontological, epistemological and theoretical variation yielded by a field’s methodological diversity provides critical balance of perspective throughout its development.

However, unlike the previous essayists, we are not focused here on the possibility that the OSM field is becoming overwhelmed/imbalanced based on (potential) overreliance on analytical modeling – though such a concern may be justifiably warranted, it is not our current topic. Rather, our purpose is to highlight a different but also potentially problematic deficiency specific to the realm of empiricist OSM research: the relative dearth and/or misapplication of qualitative research designs, and the unaddressed questions that a lack of such designs within

the field engenders. In doing so, we suggest that the primary benefit of research is not particularly that differential *findings or answers* may be revealed through different methodological strategies; instead, we deviate from the focus of Essay #2 in arguing that a more salient benefit of methodological diversity is the inherent generation of unique *questions* associated with a diverse set of perspectives or worldviews. There are easily nine (and perhaps more) distinct scientific research perspectives (c.f., Kuhn, 1996; Godfrey-Smith, 2003), of which empiricism and scientific realism, which appear by far most frequently in *JOM*, are only two. Each alternative perspective stimulates different kinds of research questions, which in turn lend themselves to being addressed by or relying on a different and diverse set of methods, many of which are qualitative.

Research perspectives such as constructivism, existential phenomenology, symbolic interactionism, and various similar others tend to embrace different assumptions about the OSM world we claim to want to understand; researchers operating under these worldviews must employ qualitative designs well-matched to the research purpose that may even draw on entirely different theoretical bases than those applied within research conducted under a traditional empiricist view. The OSM domain stands to benefit greatly from such variations from the positivist norm - scholars adopting the alternative perspectives and relying on qualitative methods, if executing studies just as rigorously as any other project, are generally able to make observations about operations and supply management phenomena that positivist approaches by definition omit due to their focus on theory testing.

Based on this argument, we share dual concerns that non-positivist approaches, and their aligned qualitative research techniques are currently (a) underutilized and (b) often misdirected or erroneously applied within the current empirical operations management literature. We sustain these concerns for two reasons. At a rudimentary level, an examination of the most recent five volumes of the *JOM* reveals proportionally few studies that adopt non-positivist philosophy as a basis for reasoning – in a relative sense, very few studies recently published in the journal begin with a viewpoint grounded in constructivist, pragmatist, or advocacy-related assumptions, and seek to enhance understanding based on such perspectives. The few identifiable exceptions found in *JOM* can best be described as a set of noteworthy case studies and isolated applications of grounded theory building embedded within mixed methods studies. Accordingly, our first criticism of the field overall and the journal in specific is that authors have shied away from developing a body of new theory specific to the operations and supply chain management domain, in favor of testing strategic management, psychological, sociological, and economic theories within the operational/SCM context, with due respect given to the OSM subject matter *du jour*. Similarly, editors have failed to persuasively call for such variation in theoretical development. A better theoretical foundation for the OSM field would necessarily require the adoption of constructivist approaches to explaining key operations outcomes via active qualitative assessment, and would be based on operational/supply chain constructs, structures, and processes themselves rather than persistently borrowing paradigms and frameworks from other fields.

However, a more damning criticism of the body of extant OSM research (specifically viewing JOM's most recent volumes) may emerge when one considers the outcomes of questions not simply left unanswered, but completely unconsidered, as the result of the virtual disregard of most qualitative strategies within the OSM literature. For instance, Creswell (2007) identifies a typology of five strategic approaches to qualitative inquiry, including the aforementioned case study and grounded theory approaches, as well as narrative research, phenomenology, and ethnography. Here, it is very critical to note that methods and perspectives are distinct constructs. For example, a scientific realist might engage in in-depth interviews or observation, but will do so quite differently than will a phenomenologist or ethnographer. We are concerned here with both the methods employed and the philosophical perspectives that support them. Many operations management problems are such because the human actor is involved. As soon as the human being becomes part of the phenomenon to be studied, it becomes prudent to open the doors to cultural, sociological and psychological aspects of the phenomenon, which are often best explored through qualitative means and require solid theoretical understanding from these other fields. Other qualitative research authors have offered similar classification systems as Creswell but having different structures, many in marketing (e.g., Hirschman and Holbrook, 1992). In each case, the research approach or "tradition" adopted is matched or aligned with a philosophical worldview, methodological processes, a set of standards for quality, and importantly, these philosophical nexuses provide the researcher access to different forms of theoretical development and understanding of the underlying

phenomena. Unfortunately, there are few, if any, studies identifiable in the OSM literature that attempt to build operations management theory by way of, for example, an ethnographic study. OSM researchers operating from a constructivist paradigm with ethnographic tradition would rely on observation, interviews and other written and spoken artifacts as data, and would focus on uncovering the norms of behavior and shared interpretations among people within organizational or supply chain micro-cultures. Yet, few if any theories of “operational culture” or “OM acculturation” exist in the literature – and because of the tacit (or active) dismissal of the ethnographic technique as a viable tool to be employed by OSM researchers, the topic itself may languish until an innovative researcher with a quantitative dataset happens to come along and test positive-empiricist relationships pertaining to the subject matter. As per the above example, the nature of qualitative inquiry is that the questions emerge or evolve based on observed events or artifacts, and theories are built from induction.

If we take logistics service quality as a second example, we can contemplate the different research questions these alternative perspectives might generate. Whereas a realist or empiricist might ask questions such as “What causes customers of logistics services to be satisfied?” or “How can supply chain managers influence logistics service quality?” a symbolic interactionist might ask different questions, such as “What is at the core of supplier and customer social interactions as customers try to solve some of their business problems through the reliance on logistics service providers?” Delving into the nuances of multiple variant constructivist perspectives and the wide variation of qualitative methods often

associated with them is beyond this essay's scope. However, we do explicitly suggest that the insights gained from answering the question "What are the direct effects of distribution center operating policy on employee morale?" differ meaningfully from, and complement, insights gained from a question such as "What are the unquestioned norms of behavior and shared stories of success among the managers and workers in a (specific kind of) distribution center as they attempt to achieve the organization's objectives?" These are the sorts of questions that a broadened theoretical, epistemic, and ontological nexus could yield, if members of our research community were to broaden their horizons. The domain and its constituencies would benefit. We have come far in OSM, but could go so much further if we opened our eyes more toward alternative ways of knowing.

### **References:**

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