Theorizing in IS Research

What Came Before and What Comes Next?

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1   Introduction

Over the past decades, the IS community has adapted theories, methodologies, and philosophies from reference disciplines to solidify its domain. This has contributed to the diversity and pluralism in our field. As the IS discipline has evolved with relatively permeable research boundaries over the years, the diversity in theoretical underpinnings has been not only healthy but also essential to the evolution of our discipline.

I find the challenges raised by Rose, Jones, and Truex to both researchers and practitioners interesting and valuable. Among other things, Rose et al. argue that there are correct and incorrect ways to use theories. The authors argue that when reference theories are taken into the domain of IS, different problems emerge. Among these problems we find how theories such as structuration theory and ANT are used and adapted in such a fashion that they stand in conflict with some of the basic assumptions in the original theory. In the challenges raised by Rose et al. we find the argument that we should stop calling contributions structurational or actor-network oriented if they violate central ideas of the original theory.

I welcome this argument to the ongoing discourse on how and why theories should be adapted to our discipline. But while I agree with their observation, I believe that Rose et al. are only partially correct about the solution. Therefore, this debate contirbution sets out to complement their argument and to shed light on the process of adapting theories to IS research. In particular I

will try to complement the insights provided by Rose et al. given that the extensive use of theories from other domains within IS, and the overall importance of theorizing in the continued development of the IS field, the importance of a rich understanding of theory adaptation cannot be over-emphasized.

2   The Double Dance of Agency: What's the Added Value?

Like Rose et al. I want theories to play a greater role in IS research. In this section I discuss what I find as a valuable contribution from Rose et al. I also outline my view of how and why theories should matter, and how this idea differs from the idea presented by Rose et al.

Theories provide a language for comprehending the world. They shape what we notice and ignore and what we believe is and is not important. To this end, I agree with Lyytinen and King (2004) that better theory is likely to contribute to stronger results. But how do we accomplish better theory? To be well versed in social theory in general, and in particular the vocabulary that is to be found in the theory one decides to use, seems to be one apparent way to accomplish better theory. The arguments put forward by Rose et al. on this matter are valuable and insightful. But before I elaborate on what I find valuable contributions in their paper I want to comment on an argument I disagree with.

The paper by Rose et al. is a contribution to the long-standing debate in the IS literature concerning the relationship between technology and organization. This debate has in recent years been revitalized by the emergence of structuration theory and actor network theory. The two theories, however, may be seen to adopt rather different, and potentially incompatible, views of agency. Rose et al. characterize this disagreement as 'the problem of agency.' They argue that neither structuration theory nor actor-network theory offer a particularly convincing account of the interaction of humans and machines, and that their different accounts of agency make them hard—if possible at all—to integrate in any meaningful way. Rose et al. argue that comparing the two theories and their use in IS raises many important issues, questions and problems, which need to be solved if the IS discipline is to develop a consistent socio-theoretical vocabulary.

I do share the author's concerns about combining the two theories. But as they do seem to be fundamentally different, why bother at all? Given the problems involved in combining the two theories I disagree with Rose at al. in

their assertion that: "While a consistent theoretical account of the agency of machines and humans, therefore, cannot simply combine the two theories, it may be that a critical analysis of their insights can enable such an account to be constructed."

I suspect that any potential benefit in combining ANT and structuration theory may not measure up to the problems one takes on board while trying to combine what may well be conflicting epistemologies. But Rose et al. "do suggest that it might be interesting to try to work towards shared theoretical understandings of human and machine agency in IS." I fail to see why. In fact, in my mind diversity and pluralism are welcome elements in the development of our field.

Having said this, I want to point out that while I do not agree with the ambition to find shared theoretical understandings of human and machine agency in IS, I find the challenges raised by Rose et al. to both researchers and practitioners valuable. In particular, I find the argument that there are correct and incorrect ways to use theories to be an interesting and important challenge to our field. When it comes to theories one cannot only take the good bits and leave the bad bits behind. If a researcher does not understand enough of the theoretical tradition from its original setting, s/he is likely to open the work up to any of the same criticisms of that theory that have already been voiced in the original discipline. An excellent example of this is the way in which uninformed use of linguistic concepts such as Chomsky's notion of 'deep structures' became problematic in IS research when it was shown that Chomsky himself had abandoned the concept years before it was introduced in the IS field, because is was widely misunderstood and misused (Truex and Baskerville, 1997; Truex and Baskerville, 1998).

The key challenge for an IS researcher approaching a theory from another discipline for use within IS is to invest the time and effort to understand the theory in its native environment, to learn the vocabulary and underlying assumptions of the theory, to understand its weaknesses as well as its strengths, and to acknowledge its previous use. But while we need to be more reflexive about the ways in which we adapt theories to our field and to deepen our understanding about how and why any theory is adapted, the faithfulness towards original theories is only a part of such reflexivity. For this reason I want to elaborate on the importance of considering not only a theory's historical context, but also the theorizing process' contribution to cumulative theory.

3 Theorizing in Context: What Came Before and What Comes Next?

It is prudent that an understanding of what a theory is should be made explicit, because how one views theory is clearly central to any theory building effort. A theory enables us to bring the components of a complex phenomenon together in one understandable whole, which then enables us to relate the complex phenomenon to a larger body of knowledge. Some have argued that theory is too often misused and this has resulted in practically any speculation being called a theory. For instance, Sutton and Staw (1995) argue that the notion of theory is inflated through overuse. As a remedy, theory must be clearly defined, and we must understand that any collection of thoughts, assumptions, and data do not comprise a theory (Sutton and Staw 1995). Weick (1995) solves the above dilemma by pointing out that "theory is a continuum." As theories move from visions to detailed constructs and propositions they loose some of their accuracy and become more of an approximation, but they also become increasingly useful to the discipline. Not everything is a theory, but it is "difficult to judge" what is a theory and what is not a theory, because "theory work can take a variety of forms" and it is work in-progress (Weick 1995, p. 387). Therefore, to recognize what is a theory it is necessary to look at the process in which the theory is being developed.

To know if what one is putting forth is a theory, you have to put it in "context of what came before and what comes next" (Weick 1995, p. 389). If you move from one part of the process to another part of the process, then there is the process of theorizing and it is or is becoming a theory (Weick 1995, p. 389). A theory should add to the body of knowledge, not just rewrite existing knowledge (Whetten 1989, p. 491). The usefulness of a theory is tied directly to its ability to guide future research. Building on Weick's description of the theorizing process, Truex, Holmström and Keil (forthcoming) explore how social theories should be adapted to IS research and argue that both the theory's historical context and the theorizing process' contribution to cumulative theory should be considered. This is in concert with Weick's idea of embedding your theoretical contribution in the context of what came before and what comes next (Weick 1995, p. 389). This includes not only the life-cycle of one's own research process but, more importantly, the ongoing discourse in the particular discipline one is immersed in. Such development depends on the generalization that Yin labels as an 'analytical generalization,' where the researcher "is striving to generalize a particular set of results to some broader theory" (Yin 1994, p. 36).

With this in mind, Rose et al. can be said to concentrate on what came before rather than what comes next. They ask us to remain faithful to the original ideas from Giddens and Latour, but following Weick's idea of theorizing we must seek not only to remain faithful to the key elements in the original theory, but also to develop the theory further. This opens up for an interesting challenge: What is the difference between not being faithful to an original theory and developing it further? A good illustration of this challenge can be found in Orlikowski's adaptation of Giddens structuration theory. Orlikowski's well-known model relates institutional properties, human agents and technology—technology is both constituted by human agency and helps constitute institutional practice (Orlikowski 1992). The inherent weakness of this model is that it tends to reinforce the equation of technology with structure and structural constrainst. However, the equation of technology with structural constraints or with agency is not consistent with structuration theory (Jones 1997). This illustrates a key challenge for researchers working with any social theory: how do we remain faithful to the main thrust of the theory at hand while developing the theory further?

4   Concluding Remarks

In a recent MISQ editorial, Ron Weber called for improved theory-building skills (Weber 2003). Arguing that our field relies too heavily on theories borrowed and adapted from other disciplines, Weber called for an increased awareness of the role of theory in our research. I agree that researchers need to be more aware of the role of theory, but disagree with the notion that importing theories is an indication of weakness in our discipline. Instead, I see that the informed and reflective use of social theory harbours continued substantial potential for the further development of our discipline. With this potential comes the problem of how these theories are adapted by IS researchers. Addressing this very issue, Rose et al. contribute to the discourse with the challenges they raise towards researchers and practitioners.

I found great interest in the topic matter selected by Rose et al. as theory use and adaptation in IS remains a contemporary and controversial issue. Their paper helps us as IS researchers with the critical task of reflecting in detail on the role of theory in our research efforts. While Rose et al. concentrate on 'what came before' (i.e., the main thrust of the original idea) I suggest we combine this with a focus on 'what comes next' (i.e., adding to cumulative theory). Following Weick's idea of theorizing we must seek not only to remain faithful to the key elements in the original theory, but also to develop

the theory further. Instead of focusing on theories as such we should focus on theorizing, a process in which theories are a part (Weick 1995). We should understand theorizing as "disciplined imagination" (Weick 1989) and theories as something that disciplines the research when it comes to focal points in the research.

This opens up for an interesting challenge: What is the difference between not being faithful to an original theory and developing it further? In my mind it is reasonable to demand of researchers to consider not only a theory's historical context, but also the theorizing process' contribution to cumulative theory. To push this issue further and to investigate the potential trade-off between these two considerations, is an important undertaking.

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