# "What Did Giddens and Latour Ever Do For Us?": Academic Writings on Information Systems and Development

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## Introduction

Over the past decade or so, a literature on information systems (IS) and development has been built up that is very mixed in style and approach.

One strand of writing has been the individual organisation or country case study. Such studies have been largely descriptive, rooted in the practical realities of IS implementation, and hard to generalise. In later years, such work runs the risk of producing a sense of deja vu - of re-treading the same old ground without making much progress in either a practical or theoretical way.

It was partly the prevalence of such writing that led to Sahay and Walsham's (1995) call for more theory-building in the field of IS and development. They argued various values for theory - a means for researchers to communicate with each other; a means for researchers to communicate with practitioners; a means for accumulation of knowledge; a means for legitimacy and recognition of an academic discipline. They also noted that writings engaging with theory can be used in two main ways: to develop and refine that theory, or to bridge the gap between theory and practice.

## The Current IS And Development Literature

What progress has been made since this 'call to arms'?

A review of subsequent writings in the proceedings of the main IS and development conferences (e.g. Odedra-Straub 1996, Avgerou and Walsham 2000) and in the journals *Information Technology for Development* and *Electronic Journal on Information Systems in Developing Countries* indicates that relatively a-theoretical material still predominates. For example, at most, ten of the thirty-five papers in the most recent conference proceedings can be said to engage with theory (IFIP WG9.4 2000). These ten root their purpose in social science theories (typically the structuration theory ideas of Giddens or the actor-network theory ideas of Callon/Latour) and return to those theories in the analysis of their data. All the papers represent writings of significant value: they are mostly accessible (more so than the theoretical sources they cite) and they clearly demonstrate a contribution to accumulation of knowledge.

However, these and other theory-engaged writings of recent years may raise question marks over the other 'values of theory' identified by Sahay and Walsham. In terms of communication between researchers, IS and development writings show a surprising and disappointing lack of inter-referencing. That is, theory-engaged writers rarely reference other IS and development writers, except self-references to their own previous work.

The IS and development field can be characterised as a 'periphery' that surrounds a 'core' of mainstream IS and social science research. Writings, then, are not peripheryto-periphery interchanges, but individualised core-to-periphery flows. IS and development writers are therefore involved in an atomised engagement with the core, instead of a collective endeavour. Theory-engaged writers may be developing a personal 'legitimacy and recognition' whilst the IS and development field overall is not.

But is this atomised engagement with the core fostering communication between researchers? In terms of flows back from periphery to core, it would appear largely not. Citation of IS and development work in mainstream IS journals is practically non-existent. Given the referencing point noted above, this is not unexpected - if IS and development writers don't seem to read and value each other's work, why should anyone else? The picture is sadly reminiscent of the relationship between development economics and mainstream economics; a picture of a flea jumping up and down on the back of an elephant demanding to be noticed.

## **Theory-Applying Not Theory-Building**

In part, the lack of interchange and citation may relate to a further shortcoming - most IS and development theory-oriented writing is 'theory application' not 'theory building'. Almost all recent theory-engaged writing takes a 'core idea' and shows how it fits a particular DC case study or set of data. This suggests too much deference to these core ideas and/or an opacity of those ideas that makes refinement hard to achieve. A rare exception is Barrett et al's (2001) recent paper that not only sought to apply but also to critique and develop some of Giddens' work. In general, though, we are seeing a one-way flow of ideas: from core to periphery.

This is a great pity because IS cases from the South have much to offer. In practical terms, such cases can be easier to research, with lower barriers to access, greater openness of respondents and greater willingness to spend time with researchers than is increasingly found in the North. Globalisation has also brought a greater prevalence and greater relevance of such cases.

Perhaps most valuably, DC information systems cases offer new insights into theory. For example, DC cases provide a unique perspective on theories like inscription and structuration. IS cases from the North can be hard to interpret because the context of inscription/design is very similar to the context of implementation and use. Adding in the 'stretch' of technology transfer throws new light onto theory by pulling the stages of design, implementation and use - and by pulling the cycles of interaction between structure and process - into a spiral that moves between different contexts. DC cases have therefore been much-valued by theory-builders working on the sociology of technology (Suchman 1987, Akrich 1992).

## The Gap Between Theory and Practice

So - if used appropriately - real-world IS cases from the South can contribute to the theories of Giddens, Latour and others. But what of the converse? Can theory-engaged writing on IS and development show a contribution to practice? There are some positive signs. As noted above, most (though not all) such writing is accessible enough to be understood by a 'reflective practitioner'. As a guide to accessibility, I always ask "can an average postgraduate student understand this?". Where they cannot, genuine readership is very limited and one must question whether the exclusionary barriers raised by terms such as 'actants' and 'structuration' are justifiable.

In terms of value to practitioners, two of the ten identified conference papers are fully focused in their conclusions on the practical implications of their findings. However, this cannot be said of the majority of theory-engaged writing - it draws from practice to inform writing, but fails to then develop findings of practical value. Yet the ultimate purpose of theory must be not just to provide a better understanding of the world but also to provide the basis for better interventions in that world. At some point, then, writings must answer the question from citizens of the South - to borrow from Monty Python - "what did Giddens and Latour ever do for us?"

In many ways this practice-related shortcoming explains why the recently-grown activities and networks on 'ICTs and development' - with their fetish for action over analysis - have overlapped so little with the long-standing 'IS and development' world. That latter world is perceived as being an ivory tower that is out of touch with realities and more concerned with theory than with practice. The continuing division acts to the detriment of both camps. It denies the ICTs and development camp the benefit of accumulated lessons and expertise; it denies the IS and development camp the funding and fora for growth.

There is also a moral point here. Academics may be seen as taking data and value from developing countries and repackaging it for the (limited) benefit of a small clique of other Western/Western-oriented theoreticians. If so, they differ little from the exploitative colonialists and capitalists extracting resources and labour value from developing countries for the benefit of Western elites. If this is to be avoided, a question for all those involved in IS and development must therefore surely be, "What benefit is being returned to the individuals and organisations and communities from whom my data was drawn?"

## Summary

In summary, IS and development writings generally need to focus more on analysis and less on description, to clearly create new and generalisable knowledge, and to engage more with theory for these purposes. Sahay and Walsham's points remain valid but, as yet, too few of their identified values of theory have been demonstrated. In particular, for those whose writings do engage with theoretical ideas, there is a continuing danger of falling between two stools - failing to add to the theory base but also failing to provide practical guidance.

Academic writing on IS and development must therefore do more to:

- criticise and refine core IS and social science theories, not just subserviently apply such theories; and/or
- develop new theoretical viewpoints that build upon the collective enterprise and shared expertise of IS and development writers; and
- ensure that writing is intelligible to the 'reflective practitioner'; and
- demonstrate the contribution that theoretical ideas can make to the practical application of information systems in development.

## References

Akrich, M. (1992) The de-scription of technical objects, in: W.E. Bijker and J. Law (eds), *Shaping Technology/Building Society*, MIT Press, Cambridge, MA, 205-224

Avgerou, C. and Walsham, G. (eds) (2000) *Information Technology in Context*, Ashgate, Aldershot, UK

Barrett, M., Sahay, S. and Walsham, G. (2001) Information technology and social transformation: GIS for forestry management in India, *The Information Society*, 17, 5-20

IFIP WG9.4 (2000) *Information Flows, Local Improvisations and Work Practices*, Proceedings of International Federation for Information Processing Working Group 9.4 (Social Implications of Computers in Developing Countries) conference, Cape Town, South Africa, 24-26 May

Odedra-Straub, M. (ed) (1996) *Global Information Technology and Socio-Economic Development*, Ivy League Publishing, Nashua, NH

Sahay, S. and Walsham, G. (1995) Information technology in developing countries: a need for theory building, *Information Technology for Development*, 6(3/4), 111-124

Suchman, L, (1987) *Plans and Situated Actions*, Cambridge University Press, Cambridge, UK