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Information Systems: A Discipline in Search of a Community; or Vice-Versa?

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Abstract

This paper takes issue with those who seek disciplinary certainty for IS, and uses the ideas of Bauman and Foucault to argue that such assurances are both delusory and futile. The recent article by Benbasat and Zmud is specifically targeted since they seek to present some definitive statement of identity for the IS discipline, and do so from a central position within the institutional sites of IS. The paper develops the argument that any such attempt at disciplining \hat{a} with its Foucauldian resonances of policing, control and constraint \hat{a} is bound to be ineffectual in the long term, but paradoxically may be helpful in generating a wide-ranging response and the development of abnormal discourses.

Keywords: IS discipline, Zygmunt Bauman, Michel Foucault, disciplinarity

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I. A FLAWED DISCOURSE

'Only a discipline flawed as a discourse has to offer an apology, feels the need to justify its right to exist. ... Concern with self-justification has been, since the beginning, a conspicuous feature of Information Systems discourse.' (Bauman, 1992, p. 76)

The original version of this quote used the word *sociological* but the sentiments clearly apply equally to IS. Bauman sets the scene for the emergence of sociological discourse in terms which also fit the emergence of IS – 'brought into being by the encounter between the awesome task of the management of organizational processes on a grand, *corporate and* societal scale and the ambitions of the modern state *and corporation*'' (some terms added in italics – 1992, p. 76).

Bauman notes that the outcome of this encounter between management and social ambition was the articulation of a 'collection of engineering *problems*'. In similar fashion, and in part deriving from the same impetus, the technology and its accompanying conceptual apparatus arrived as a set of engineered solutions. But this is not the feature that makes IS into a flawed discourse. The problem arises because IS has no obvious and consensually understood autonomy from other discourses; and in this sense it is similar to sociology. Drawing on the work of Foucault, Bauman demonstrates that disciplines cannot be defined in terms of what might appear to be the 'obvious' aspects such as 'permanence of a thematic' or 'a well-defined alphabet of notions'; but, following Foucault, must be seen as *discursive formations*.

'We sought the unity of discourse in the objects themselves, in their distribution, in the interplay of their differences, in their proximity or distance – in short, in what is given to the speaking subject; and in the end, we are sent back to a setting-up of relations that characterizes discursive practice itself; and what we discover is neither a configuration, nor a form, but a group of *rules* that are immanent in a practice' (Foucault quoted in Bauman, 1992, p. 69)

From this perspective any discipline must be seen to constitute its topic and its practices. As Bauman argues it is not a case of reality waiting to be portrayed by 'its court painter'. There is no pre-existing corner of reality waiting to be claimed and explained by a specific discipline; nor is the discursive formation a 'disturbing element' which superimposes itself upon some 'pure, neutral, atemporal, silent form'. The 'incessant activity of discourse ... spawns the narrated reality at one end and the narrating reason at the other'. (p. 70)

Furthermore this 'narrating' is not something that can be ascribed to specific individuals but has to be located and grounded within institutional sites 'from which this discourse derives its legitimate source and point of application' (Foucault quoted in Bauman, 1992, p. 70). Foucault makes the point very

explicitly with reference to insanity, psychopathology and medicine. Thus the institutional sites from which medical expertise is dispensed, from which it 'derives its legitimate source and point of application' (Foucault, 1972, p. 51), are those associated with hospitals and the generic medical infrastructure. Similar institutional issues apply to the IS discipline as it currently exists; and the prime dispensaries include, but are not restricted to, institutions such as MIS Quarterly [MISQ], IS Research [ISR] and the Association for Information Systems – all predominantly albeit not exclusively North American.

Thus a discipline may be announced and instigated; but for any discipline to claim and sustain its own identity it has to establish and maintain its autonomy with regard to other discourses – drawing and defending its boundaries. In this respect disciplines vary in their ability and propensity to maintain their distinctive character and boundaries. For many esoteric sciences this is not a primary issue since the boundary may be widely, if sometimes grudgingly, acknowledged.¹ Bauman points to physics as a discipline where such self-delineation is exemplified; although he also uses the example of political statements under totalitarian regimes as another -

non-specialists would not challenge the statements of the physicists for lack of access to the events which they narrate; the subjects of an authoritarian government would not contest political pronunciations for lack of access to data guarded by official secrets acts. (p. 72)

He adds that in most cases 'the two factors intertwine'; echoing the ideas of Feyerabend who likened the operation of scientific disciplines to organized crime gangs.

The IS discipline as it now exists exemplifies Bauman's and Foucault's observations regarding the nature of such discursive formations and their potential crises of identity and imperfections as a discourse. There has been an incessant stream of articles, books, conferences and so on focusing on the *identity* of the discipline. There are endless boundary disputes over endless boundaries, and even fundamental concepts such as *information* are lacking in any consensual definition. In addition, the ubiquity of the technology has resulted in extensive familiarization both in an everyday manner and on the part of rival disciplines, so that increasingly any claims to specialism and superiority on the part of those at the centre of the discipline are open to challenge or undermined completely. Technology is truly quotidian.

¹ In fact acknowledgement of boundaries does not usually have to be 'wide', but does have to be clearly acknowledged by those other disciplines most closely related. This is a particular problem for IS - there is no corner of a foreign field that is forever IS!

II. YEARNING FOR AN IS DISCIPLINE

Demonstrating Bauman's point about a flawed discourse having to offer an apology for its identity and existence, the principal institutional centres of existing IS have continued to wrestle with the issues of identity and demarcation. One of the most recent examples appeared in MISQ 2003; an article by Benbasat and Zmud – both senior figures within the institutional sites of IS, and both past editors of MISQ. They argue that the IS scholarly community has from its emergence in the 1970s sought to 'develop a meaningful, resilient identity within the institutions that comprise its organizational field – namely the organizational science and information science research communities, business and information science academic institutions, and the various organizations, industries, and professional groups that comprise the information technology (IT) industry.' Acknowledging that after 30 years 'insufficient progress has been made', the authors are keen to provide a basis upon which a meaningful, resilient identity can be built.

They begin, promisingly if confusingly, by characterizing IS scholars as 'a community of nascent entrepreneurs attempting to create a new population, i.e., the IS discipline'. This appears to echo Foucault's idea of a socially mediated discourse or discursive practice; but why the use of the term 'population' rather than 'institution'? This is made immediately apparent since the authors have derived the term from the work of Aldrich who was writing about *organizational* development; a context in which the idea of an organization as a population seems appropriate. Aldrich grounds this process of creation of a new population in two forms of legitimacy – 'cognitive' and 'sociopolitical'. The latter bears some resemblance to the issues elucidated far more provocatively and insightfully by Bauman, following Foucault, since it refers to 'acceptance by key stakeholders, the general public, key opinion leaders, and government officials of a new venture as appropriate and right'. But this is of only minor concern to Benbasat and Zmud; they are far more worried about cognitive legitimacy – leading to 'acceptance of a new kind of venture as a *taken for granted* feature in the environment' (stress in quote as it appears in the original, p.184).

They assert that 'the IS discipline has made significant progress' with respect to 'sociopolitical' legitimacy,

as seen via the institutionalization of IT as an integral part of today's organizational and economic contexts, the acknowledgement of the importance of IS by academic accreditation bodies, the presence of IS academic departments and the degree programs ..., a professional society (Association for Information Systems) ..., and the aforementioned respect afforded to *MIS Quarterly* and *Information Systems Research* (p. 185)

But for Benbasat and Zmud this is not sufficient, they yearn for cognitive legitimacy; precisely the unity of discourse based on a 'well-defined alphabet' or 'permanence of a thematic' that Foucault and Bauman characterize as an elusive and impossible objective. Benbasat and Zmud specifically state that their aim is to articulate 'An Identity for the IS Discipline'. Almost as if they have read Bauman, and are seeking to offer a mirror image of his argument, they claim that a 'natural ensemble of entities, structures, and processes does exist that serves to bind together the IS subdisciplines and to communicate the distinctive nature of the IS discipline to those in its organizational field – the IT artifact and its *immediate* nomological net' (stress in original).²

Since no specific definition is offered of the term *nomological net*, it must be assumed that it is largely another way of stating that the IT artefact exists, and so too does this 'natural ensemble of entities'. What comprises this ensemble is indicated in a diagram with accompanying text. The authors explain that their view of what constitutes the approved and legitimate purview of IS consists of striving to understand

(1) how IT artifacts are conceived, constructed, and implemented, (2) how IT artifacts are used, supported, and evolved, and (3) how IT artifacts impact (and are impacted by) the contexts in which they are embedded (p. 186)

Benbasat and Zmud clearly wish to constrain the interpretation of their set d core properties to a managerial, methodological view of the world. Thus they stress that the nomological net is to be thrown around only those constructs that are '*intimately* related to the IT artifact'. To clarify this view they point to what they term *errors of inclusion* and *errors of exclusion* with regard to articles that have been previously published in MISQ. Their main reason for doing so is that such errors lead to ambiguity in the 'boundaries of IS scholarship'. Their tacit, but clear message is that flagship publications such as MISQ should be the site of unambiguous delineation of the discipline's identity and reinforcement of the discipline's boundary.

² The fascination with 'The IT artifact' can be traced back to a key article by Orlikowski and Iacono in 2001 in the other house journal of the IS gate-keepers – *IS Research*. It should be noted that although the phrase seems redolent of those who always want to stay close – conceptually – to the stuff you can kick, raising the issue of the IT artefact is an attempt to get researchers to 'take technology seriously'. On the other hand this topic has taken a new turn with the paper by the editor of *Harvard Busines Review* in May 2003, provocatively entitled *IT Doesn't Matter* – see Carr, 2003.

III. SEARCHING FOR THE MYTHIC CORE

In offering this view of the discipline and its governance, Benbasat and Zmud are continuing a discussion that has beset IS since its inception, but which has grown in intensity particularly in the US in the past few years as the existence and budgets for IS departments in universities have come under attack.

However much IS-purists such as Benbasat and Zmud might try to defend some mythic *core* of the discipline, there is a necessary and inevitable engagement with a whole variety of other disciplines, which leads to profound problems of identity and demarcation. IS is a 'flawed discourse'. The boundaries between it and other discourses are fuzzy – indistinct to the point of disappearance; and the topics at the centre of the discourse are claimed not only by other discourses but by everyday 'commonsense'. Indeed, with the ubiquity of the technology and the terminology, these claims have actually increased to the extent that in 1999 Markus could ask 'What Happens if the IS Field as we Know it Goes Away?'

Markus was not arguing that the field will actually disappear in the sense that 'Horse and Buggy' studies might have disappeared – or certainly declined – had it ever existed in the 19th century academy. On the contrary, the threat is not one of disappearance but of dissipation and dissolution. 'As computers increasingly become embedded in every aspect of personal and organizational life, it is less and less possible to distinguish between computing and *everything else*.' (1999, p. 176) The unthinkable, as Markus puts it, is that the IS disciplinary turf will be cut up and hauled away by a host of other disciplines. 'We bemoan the fact that intellectual communities like organizational behaviour, operations management, and marketing are *discovering* information technology (IT) as an important topic for *their* teaching and research. ... we see them as laying claim to research domains that we think of as ours.' (p. 175).³

Her evidence to support the claim for endangerment of Academic IS^4 is that – at least in the USA – resources aimed specifically at Academic IS are under effective attack from other parts of the academy. Significantly fewer posts are being allocated to this area, the justification being that the same requirements can be met with hiring 'IT-knowledgeable non-IS faculty'. This trend might be reversed if there is a large and continuing demand for Academic IS itself – but that begs the question of what constitutes Academic IS as such. In order to answer this question Markus develops her argument initially by examining the ramifications of a customer-based justification for this topic. Thus, like

³ At this point I leave it to the reader to decide who is included in the 'we' to which Markus refers.

⁴ Given the confusion that would be caused by using AIS as an acronym for Markus' concept of *Academic IS*, I have resisted any abbreviation of the term.

Benbasat and Zmud, Markus is arguing from an embattled position that aims to defend the disciplinary turf of IS from a range of predators in rival areas. This is not just a conceptual issue, it relates to jobs, budgets, research grants and other concerns understandably close to the heart of all academics.

The customer-based argument uses the parlance and procedures of business planning and applies them to the area, in order to identify 'the *customer* and the *core mission* of Academic IS teaching, research and practice' (p. 178). Markus notes that the general assumption has been that the key customers are 'organizations that use computers', but this is problematic or certainly too simplistic since it fails to differentiate between *user*-organizations (i.e. where IT/IS products and services are consumed) and *producer*-organizations (i.e. where IT/IS products are developed to be sold on to others) – the latter growing in importance as outsourcing has developed and grown more pervasive.

In order to develop her argument Markus attempts to clarify the mission of Academic IS, not a simple task since it is built upon such disparate foundations. Thus the view of those who would characterize the mission as developing 'useful computing applications (software) efficiently and effectively' (p. 179) offer far too dated and limited a view; while those who consider aspects such as management,⁵ rather than technical development can find themselves having to fight their corner against the technical people on one side and the business and management specialists on the other.

Markus' response to this doubly unsatisfactory, but perhaps largely self-inflicted, state of affairs is to widen the scope of Academic IS considerably, both in terms of customers and mission. In order to overcome any disagreeable implications of her argument, which seems to be leading to a product without a unique selling point, she offers an alternative view of the subject as the 'electronic integration of socio-economic activity'⁶ (p. 197). With tongue firmly in cheek, she adds her 'personal contribution to the terminological turmoil', expanding IT as '*Integration Teknowledgy*, where *integration* is shorthand for *electronic integration of socio-economic activity* and *teknowledgy* is my term for *knowledge and skill in the area of electronic content, information, communication, technologies and systems*'. Unfortunately, however, Markus leaves her readers with a perplexing coda, since she concludes by calling for jettisoning the Academic IS field of the past 'so that we can create the IT (sic) field of the future!' (p. 202) – the slogan severely underselling the product.

This undermines the whole tenor of her argument about the distinction between IT, IS, Academic IS and the like; simultaneously committing what Benbasat and Zmud refer to as the error of *inclusion*. Her six forms of integration seem to cover a vast range of issues, crossing into other disciplines and simultaneously blurring the boundaries between them. Again we have an indication that here is a flawed

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⁵ Whether this is management of IT, IS or Information is not stated.

⁶ Hardly the slogan for an effective marketing campaign

discipline, constantly needing to justify its existence, with indistinct boundaries that are unrecognized and challenged by rivals, and with central 'objects and events already construed and pre-interpreted within other social discourses'. Both Benbasat and Zmud, in a fairly positive tone, and Markus, with a potentially pessimistic one, are responding to a perpetual crisis of identity.

IV. DOUBT IS UNCOMFORTABLE; CERTAINTY IS ABSURD

Following the logic of Bauman's argument, there is no reason to suppose that the stream of writing that tackles the identity issue for IS will come to some definitive halt. The editor of the MISQ issue in which Benbasat and Zmud's article appeared noted that 'I doubt that we will ever achieve unanimity within the information systems discipline about whether we have a serious identity problem within the discipline' (Weber, 2003). This might look like something akin to a couple arguing over whether or not they are incompatible; but in fact the editor is simply describing the true state of affairs. In contrast to Markus, and Benbasat and Zmud, some are happy to embrace a 'fragmented adhocracy', others argue in favour of diversity, and against any effort to devebp and regulate a unifying paradigm. This latter group might point to other disciplines that are in a similar state, but the MISQ editor argues that this is no reason to ignore the real concerns.

What we have as the current state of affairs in IS is a paradigm case of a discipline as a flawed *discursive formation*: Constantly engaged in the Sisyphean task of having to justify its existence. Much as some might wish this state of affairs to be brought to an end in some conceptually sound and conclusive fashion, this is not going to occur. On the other hand, the discipline can be seen as an 'incessant activity of discourse' spawning the *narrated reality* and the *narrating reason*; with both emanating from a well-recognized and self-perpetuating group of institutional sites. Thus the editors and key contributors to MISQ and IS Research, together with those at the top echelons of the AIS, IFIP, and key funding organizations could seek to impose their view of the *core values and properties* on the discipline through the expedient of supervising – or 'policing' in Foucauldian terms – the avenues of publication, recruitment and research funding. Benbasat and Zmud seem fairly content with the 'sociopolitical' basis for the discipline; and perhaps they are specifically calling for key institutional sites such as MISQ and IS Research to constrain publication to a narrow range of issues.

It might then appear feasible for a series of wide-ranging and coincidental editorial decisions to establish the boundaries and identity of the discipline. Perhaps this is already in train in the aftermath of Benbasat and Zmud's positing a set of core values, and Orlikowski and Iacono's insistence on a focus around the 'IT artifact'? But any such attempt at *closure* is fortunately bound to prove ineffective; and although the IS disciplinary establishment is fairly easy to identify (consisting of real authorities and virtual

institutions), it is unlikely to strive – consciously – for such an end. Indeed the wide-ranging debate that has followed publication of Benbasat and Zmud's article is evidence to the contrary.

The foregoing should not be taken to imply that MISQ and ISR are total redoubts secured against any alternative or critical voices. The issue in which Benbasat and Zmud's article appears also contains a paper by Lamb and Kling aiming to 'reconceptualize users as social actors' – with Zmud named as the accepting senior editor. It could be argued that this is squarely within the core properties of IS – a component of the *nomological net*; but this is difficult to sustain after a careful reading of the piece and its bibliographical sources. More importantly the authors of papers in both journals seem to be drawn from a relatively small and specific group, and this excludes many well known figures who publish widely elsewhere. Of course this may be a self-perpetuating state of affairs, with non-like-minded researchers failing to submit their work to these two journals since they have won a reputation for 'only' publishing 'main-stream' articles.

Bauman observes that the 'predicament of sociological discourse may best be grasped by the Kantian idea of an *aesthetic community* ... a territory defined by agreement inside well-protected boundaries' (1992, p. 75). A similar predicament confronts the existing IS discourse, for Bauman shows, using the work of Lyotard, that such a community is an illusion.

The community required as a support for the validity of such judgment [of taste] must always be in the process of doing and undoing itself. The kind of consensus implied by such a process, if there is any consensus at all, is in no way argumentative but is rather allusive and elusive ... This kind of consensus is definitely nothing but a cloud of community. (Lyotard, quoted in Bauman, 1992, p. 75)

In his later writings Bauman claims that all communities are illusory; but here Bauman concludes that sociological discourse is truly constituted by the Sisyphean objective of seeking to establish and sustain a 'real community', but if ever it managed to achieve this goal, it would mark the death knell of the discourse: So too for IS.

This means that although efforts such as those of Benbasat and Zmud, Markus, and Orlikowski and Iacono are ultimately doomed; they are also ineluctable and must be awaited and answered. In so doing there is the necessity to develop critical thought in Foucault's sense of 'the endeavour to know how and to what extent it might be possible to think differently, instead of legitimizing what is already known' (quoted in Bauman, 1992, p. 83) – what Rorty advocates as *abnormal discourse*. In this sense Benbasat and Zmud have provided a service to the IS community – however imaginary – by provoking a range of responses that ultimately amount to a profound rejection and refutation of their argument.

REFERENCES

Bauman, Z., (1992) Intimations of Postmodernity, Routledge, London.

Benbasat, I., and Zmud, R.W., (2003) "The Identity Crisis within the IS Discipline: Defining and Communicating the Discipline's Core Properties", *MIS Quarterly*, (27) 2, pp. 183-194.

Carr, N., (2003) "IT Doesn't Matter', Harvard Business Review, May 2003.

Foucault, M., (1972) The Archaeology of Knowledge, Tavistock, London - French original, 1969.

Markus, L., (1999) 'What Happens if the IS Field as We Know it Goes Away?', in W.L. Currie and R. Galliers (eds.), *Rethinking Management Information Systems*, Oxford, pp. 175-203.

Orlikowski, W.J., and Iacono, C.S., (2001) "Desperately Seeking the 'IT' in IT research - A Call to Theorizing the IT Artifact", *Information Systems Research*, (12) 2, pp. 121-134.

Weber, R., 'Editor's Introduction', MIS Quarterly, (27) 2, pp. iii-xi.

INDEX

I. A FLAWED DISCOURSE	4
II. YEARNING FOR AN IS DISCIPLINE	6
III. SEARCHING FOR THE MYTHIC CORE	8
IV. DOUBT IS UNCOMFORTABLE; CERTAINTY IS ABSURD	. 10
REFERENCES	12

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Keywords: IS discipline, Zygmunt Bauman, Michel Foucault and disciplinarity

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