

2 THE MOVING FINGER: THE USE OF SOCIAL THEORY IN WG 8.2 CONFERENCE PAPERS, 1975-1999

Matthew Jones
Judge Institute of Management Studies
University of Cambridge
England

*The moving finger writes; and, having writ,
Moves on: nor all thy Piety nor Wit
Shall lure it back to cancel half a line
Nor all thy Tears wash out a Word of it.*
Fitzgerald, *The Ruba'iyat of Omar Khayyam*

1. Introduction

The remit of Working Group 8.2 (WG 8.2) is officially identified by the International Federation for Information Processing (IFIP) as “the interaction of information systems and the organization” and its “Scope and Aims” statement (<http://www.ifipwg82.org/>) talks of “building theories about the role and impact of IT in specific organizational contexts.” Thus, while WG 8.2 may not be the only group of IS researchers concerned with understanding the relationship between social context and the development and use of information systems, for example, WG 8.1 (“Design and Evaluation of Information Systems”) and WG 9.1 (“Computers and Work”) may be expected to share similar interests, the Group would seem a potentially important forum for research that seeks to address the social dimension of IS. To the extent, moreover, that interest in social context may be seen to be characteristic of the concerns of interpretative research methods, the growing acceptance of such methods in mainstream journals such as *MIS Quarterly* could be seen to place WG 8.2 in the vanguard of the IS field.

Before WG 8.2 members become too conceited about themselves as brave pioneers at the frontier of IS research, however, it may be worth considering the record of the Group in manifesting an appreciation of the social dimension of IS in its own work. One measure of such appreciation, it may be argued, might be taken to be the use of social theory: seeing how far the frameworks and theories developed by Group members actually draw on the disciplines that most directly address the social issues with which it purports to be concerned. In this paper, therefore, an analysis will be presented of the proceedings of WG 8.2 conferences to examine the extent to which social theorists have been explicitly cited. The analysis will also seek to explore the pattern of citations over time to see how this may have changed. Has interest in social theory grown over the course of the Group's history? Which particular theorists have been most cited? Is there any evidence of a cumulative tradition (Keen 1991) or of transient fashions (Abrahamson 1996)?

The structure of this paper is as follows. In the following section, the case for considering use of references to social theorists as a measure of the appreciation of the social dimension of IS will be discussed. This is followed by a description of the methodology employed in analyzing the WG 8.2 conference proceedings. The results of this analysis are then presented and comments on these findings are made. The paper concludes with a discussion of the implications of the findings for IS research in general and WG 8.2 in particular.

2. Social Theory and IS Research

A number of objections could be raised to the use of references to social theorists as a measure of the appreciation of the social dimension of IS and it would seem important to address these before proceeding with the analysis. The first objection might be that the IS field is, or should be, theoretically self-sufficient and that theories from other domains are irrelevant to an understanding of IS phenomena. WG 8.2's "Aims" statement, however, describes the Group as seeking to develop "integrative frameworks...based on a wide range of disciplines." The contribution of other disciplines to IS research would seem to be recognized, therefore, within WG 8.2 at least.

A refinement of this initial objection might be that even if other disciplines can usefully contribute to IS research, the theories and concepts from these disciplines are of limited direct use as they require significant adaptation to IS-specific conditions. As Keen (1991) and Jones (1997) have argued, however, many, if not all, of the issues relating to the social aspects of information systems are already staple elements of the concerns of other disciplines. The case for the IS field developing an idiosyncratic theoretical basis would, therefore, seem weak.

The desirability of IS researchers being aware of, and drawing on, theory from other disciplines in their work, moreover, need not be justified solely in terms of economy of effort. An orientation that is receptive to theoretical ideas from sources outside the IS field would also seem likely to promote a richer appreciation of IS issues. By putting these issues in a larger perspective, they may be understood as particular cases of broader phenomena, and as located within wider contexts, whether social, historical, or economic. Explicitly seeking to connect IS work with that in other domains also offers the

opportunity for exchange and, as Keen argues, potential influence. If IS researchers only cite each other, then the field risks becoming narrow and hidebound. Measuring IS research against the standards of other fields may also help to encourage sophistication and innovation in IS research practice.

A third objection might be that focusing on the contribution of social theory is casting the net too widely and overlooking a field more evidently applicable to the interests of WG 8.2, namely organizational theory. Despite the argument of writers such as Donaldson (1985) that organizational theory is a distinctive area of research separate from social theory, however, this view is not widely shared. More typically (e.g., Burrell and Morgan 1979) organization theory is seen as a specialized subset of social theory. This is not to say that organizational research does not have a distinctive domain of study or particular issues that it addresses more than most, but its main underlying concerns may be seen to be addressed in other fields. In this respect, the relationship of organizational research to social theory may be seen to be analogous to that of IS, rather than being an equivalent “reference discipline” in its own right. This would seem particularly the case given the rather blurred boundary between the organizational and IS literatures, with significant IS articles being published in organizational journals such as *Administrative Science Quarterly*, *Organization Science*, and *Organization Studies*.

Finally, it should be noted that in analyzing the contributions from social theory to the work of WG 8.2 the aim is not to suggest that other areas, such as systems or computer science, have not made significant contributions to IS research. Rather, since, as was argued above, a concern with social issues may be seen to be an important differentiation for the work of WG 8.2, the extent to which social theory has been drawn on in papers presented at its working conferences would seem deserving of particular attention.

3. Research Methods

An analysis was conducted of the references cited in papers included in the published proceedings of 15 WG 8.2 conferences from 1979 to 1999, as shown in Table 1. It is not certain, however, whether Table 1 includes all of the WG 8.2 conference during this period. The Group itself does not have records, let alone copies, of the proceedings of all its conferences and the IFIP Secretariat records only go back to 1986. Despite inquiries to long-standing WG 8.2 members, some of whom had recollections of earlier conferences but could find no references for any proceedings, therefore, it is possible that Table 1 is incomplete. It does, however, match the British University Libraries’ combined catalogue records of IFIP-related conferences, so any earlier conferences may not have had published proceedings or did not identify themselves as having been organized by IFIP WG 8.2. Table 1 also concurs with a note by Hank Lucas, the first chair of WG 8.2, in *Oasis* (Lucas 1994), which reported that the Group’s first meeting was probably in Amsterdam in autumn 1975, and that the first WG 8.2 working conference was held in Bonn from 11-13 June 1979, with the proceedings being published as Lucas *et al* (1980). There then appears to have been a gap of four years until the second conference in Minneapolis in 1983, since which time they have continued every nine to 18 months to date.

Table 1. IFIP WG 8.2 Conferences, 1979-1999

Date	Location	Proceedings
11-13 June, 1979	Bonn, Germany	Lucas et al. (1980)
22-24 August, 1983	Minneapolis, USA	Bemelmans (1984)
1-3 September, 1984	Manchester, UK	Mumford et al. (1985)
27-29 August, 1986	Noordwijkerhout, The Netherlands	Bjørn-Andersen and Davis (1988)
29-31 May, 1987	Atlanta, USA	Klein and Kumar (1989)
2-4 July, 1989	Ithaca, USA	Kaiser and Oppeland (1990)
14-16 December, 1990	Copenhagen, Denmark	Nissen, Klein, and Hirschheim (1991)
14-17 June, 1992	Minneapolis, USA	Kendall, Lyytinen, and DeGross (1992)
17-19 May, 1993	Noordwijkerhout, The Netherlands	Avison, Kendall, and DeGross (1993)
11-13 August, 1994	Ann Arbor, USA	Baskerville et al. (1994)
7-9 December, 1995	Cambridge, UK	Orlikowski et al. (1996)
26-28 August, 1996	Atlanta, USA	Brinkkemper, Lyytinen, and Welke (1996)
31 May - 3 June, 1997	Philadelphia, USA	Lee, Liebenau, and DeGross (1997)
10-13 December 1998	Helsinki, Finland	Larsen, Levine, and DeGross (1998)
21-22 August, 1999	St Louis, USA	Ngwenyama et al. (1999)

The analysis carried out involved the identification of *all references that might be broadly defined as being to works of social theory in all the submitted papers in all the conference proceedings listed in Table 1*. Keynote papers were excluded, where it was possible to identify these, as they are often given by people from outside the WG 8.2 community and may, therefore, be considered un-representative of its views or, if by WG 8.2 members, typically offer an overview of a particular topic that might be expected to adopt a different approach to theory than a general research paper. The paper by Hirschheim (1985) was also excluded for this latter reason. As descriptions of panels were not always included in proceedings, and their use of references was also not consistent, these were excluded too. This gave a total of 293 papers over the period.

A very inclusive definition of “social theory” was adopted. Indeed, it was more a matter of recording all references apart from those that could be clearly identified as *not* being the work of social theorists. This resulted in a list of 154 names including not just sociologists, such as Bourdieu and Giddens, but also economists, such as Coase and Williamson, and philosophers, from Plato to Rorty.

The range of social theory analyzed thus included most of the “reference disciplines” specifically identified by Klein et al. (1996) in the first draft of the WG 8.2 “Aims” statement, i.e., “philosophy, history, sociology, political science, management and

computer science,” with the exception of the last two. Computer science was excluded as not being a social science, even broadly defined, while management was seen to be in the same position with respect to IS as was described above in relation to organization theory.

In most cases, the inclusion criterion proved relatively simple to apply, but, with a few management theorists, the boundary was not always so clear. For example, F. W. Taylor, and relatedly Braverman, were excluded as being primarily organizational theorists despite the sociological import of their work. On the other hand Weber, and perhaps more questionably Crozier, were included. In practice, these decisions made relatively little difference to the results (excluding them would only reduce the total number of authors cited by about six), but the existence of an element of subjective judgement in setting the boundary may be noted. A related decision was whether to include management or organizational works by authors who might otherwise be described as social theorists. An example is Kolb, whose learning circle is arguably a work of social psychology, but who has also written on its management implications in *Sloan Management Review*. The principle adopted was to include all works of such authors. Conversely, sociological works that were primarily concerned with methodological, rather than theoretical, issues, such as Miles and Huberman (1984) and Yin (1984), were excluded. The possible exception to this rule was the inclusion of Burrell and Morgan (1979) on the grounds that its survey of social and organizational theory may be a significant, if not always beneficial (Jones 1999a), source of influence on the understanding of social theory in the IS field.

Each work of social theory, identified according to these criteria, that was cited in each paper was recorded. Thus the number of works by any theorist cited in a particular paper, as well as the numbers of papers citing a particular social theorist, were identified. The country of the institution identified as the location of the first-named author for each paper was also recorded, unless this author explicitly identified themselves as a visitor, in which case the location of their “home” institution was recorded.

As a comparison, a search was also made of the ProQuest bibliographic database, which includes the full text of about 500 management journals. This sought to identify all articles referring to four of the social theorists most widely-cited in the WG 8.2 proceedings in combination with the term “information system” or “information systems.”

3. Results

Of the 154 social theorists identified, 89 were cited in more than one paper. Only 14, however, were cited in more than 10 papers. Table 2 lists these authors and the number of citations to their works (a paper could cite more than one work by a particular author) at WG 8.2 conferences between 1979 and 1999 and also since 1992. The other authors, cited in less than 10 papers, are listed in Appendix 1. The maximum number of social theorists cited in any one paper was 22, and the maximum number of works of any social theorist cited in one paper was nine for Habermas. More than three quarters of the references, however, were to only one work by a particular theorist and only just over a third of the papers cited more than one social theorist.

Table 2. Social Theorists Cited in More than 10 Papers at WG 8.2 Conferences, 1979-1999 and 1992-1999

	1979-1999		1992-1999	
	Number of papers citing	Number of citations	Number of papers citing	Number of citations
Giddens	34	44	24	33
Habermas	27	56	17	29
Burrell and Morgan	24	24	10	10
Berger	23	25	13	13
Latour	18	35	18	35
Foucault	15	37	14	36
Geertz	15	21	10	16
Glaser	15	17	10	12
Rogers	15	19	12	15
Popper	11	14	3	3
Williamson	11	16	8	12
Callon	10	19	10	19
Gadamer	10	15	4	6
Law	10	16	10	16
Total	238	358		

As Table 2 indicates, the “popularity” of particular theorists has varied over time. For example, all of the citations of Actor Network Theorists (Latour, Callon, and Law), and all but one of Foucault’s, have occurred after 1992, while the majority of references to Popper and Gadamer occurred before that date. Figure 1 illustrates this in more detail for four of the most widely-cited authors. While Giddens has been the most frequently-cited theorist overall, citations of the work of Latour have grown rapidly since 1994, such that he was the most-cited theorist at the 1995, 1997, and 1998 conferences. Conversely, the works of Habermas appear to be relatively less cited in recent conferences.

Another view of the change in citations over time is provided by an analysis of a “social citation density” (the total number of social theorists cited in all papers at a particular conference divided by the total number of papers at that conference) of the different conferences as shown in Table 3. This indicates that this value has generally increased over time, but that certain conferences were notable for the large number of references to social theory, especially Manchester 1984, and that others have had a much lower proportion of references to social theorists. Table 3 also indicates the proportion of papers at each conference not including any references to social theorists.

From Table 3, we can see that the citation density for conferences that were held in the USA was lower than for those held in Europe (1.8 compared with 2.3) and the proportion of papers at U.S.-based conferences not citing any social theorists is also slightly higher (46% compared to 40%). Considering the institutional affiliation of first-named authors of papers, we find that papers by U.S.-based authors also showed a slightly lower citation density (1.8 compared with 2.0) than authors from other countries, but that there was no difference in the proportion of papers not citing any social theorists between these two groups of papers (both had 44% of papers with no citations).

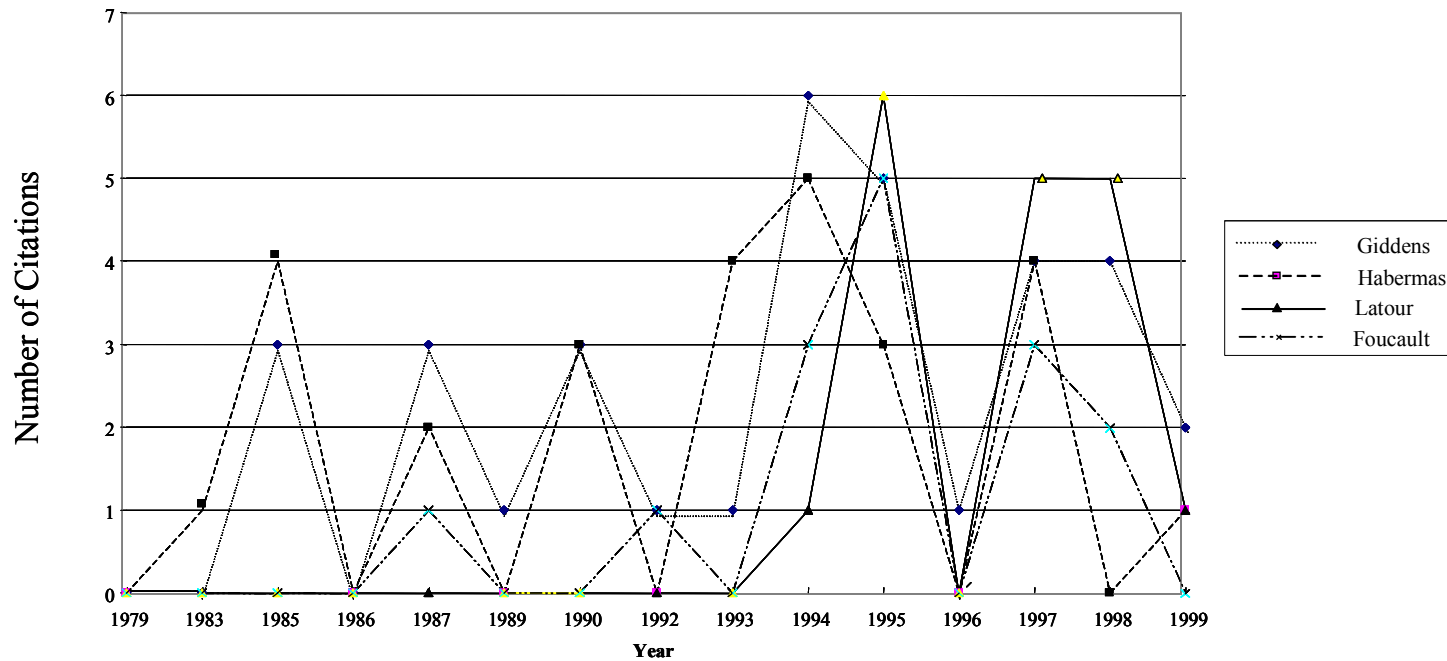


Figure 1. Frequency of Citation of Social Theorists in Papers at WG8.2 Conferences, 1979-1999

Table 3. Rates of Citations of Social Theorists at WG 8.2 Conferences, 1979-1999

Conference		Number of papers	Total citations	Papers with no citations	Citation density	No citations %
1979	Bonn	24	8	18	0.3	73
1983	Minnesota	23	12	19	0.5	83
1984	Manchester	12	58	1	4.8	8
1986	Noordwijkerhout	21	11	15	0.5	71
1987	Atlanta	13	28	6	2.2	46
1989	Ithaca	20	16	11	0.8	55
1990	Copenhagen	27	102	5	3.8	19
1992	Minneapolis	14	16	7	1.1	50
1993	Noordwijkerhout	22	21	10	1.0	45
1994	Ann Arbor	18	46	4	2.6	22
1995	Cambridge	18	75	5	4.2	28
1996	Atlanta	17	4	14	0.2	82
1997	Philadelphia	22	92	2	4.2	9
1998	Helsinki	29	80	7	2.8	24
1999	St Louis	14	39	2	2.8	14
Total/Average		294	608	126	2.1	43

Table 4 presents the results of the journal analysis. This indicates that the four widely-cited social theorists in the WG 8.2 conference proceedings were also regularly cited in conjunction with the term information system(s) in management journals. Not all of these citations were in Information Systems journals, however. Thus, looking just at the numbers of times these authors were cited in *MIS Quarterly* and *Journal of Management Information Systems* (the only two IS journals picked out by the ProQuest search), we find that these journals account for less than half of the total citations and, in the case of Foucault, for less than 15%.

4. Discussion

With references to 154 different authors, nearly 90 of whom were cited more than once, and with economists and philosophers as well as sociologists receiving more than 10 citations, the WG 8.2 conferences may be seen to illustrate a considerable breadth of theoretical interest. At the same time, however, it could be argued that the analysis demonstrates a fairly selective approach to social theory. Thus, the works of Giddens, Habermas, and, more recently, Latour have perhaps received disproportionate attention relative to other theorists such as Bourdieu, Garfinkel, Strauss, or Schutz (to pick a few

Table 4. Frequency of Citation of Four Social Theorists in Association with the Term “Information Systems” in Certain Management and IS Journals, 1992-1999

All journals	Giddens	Habermas	Foucault	Latour
1992	0	1	1	0
1993	0	0	0	0
1994	0	2	2	2
1995	7	0	2	2
1996	0	0	0	0
1997	2	1	0	2
1998	7	2	6	4
1999	7	3	4	3
Total	23	9	15	13
IS Journals only				
1992	0	0	0	0
1993	0	0	0	0
1994	0	2	1	0
1995	0	0	0	0
1996	5	0	0	0
1997	1	0	0	2
1998	0	0	0	0
1999	5	1	1	1
Total	11	3	2	3

examples of authors receiving only three or four citations). Unless it is felt that the most widely-cited authors have a unique insight on IS phenomena, then there would seem to be considerable opportunity for extending the Group’s theoretical resources through an exploration of such comparatively-neglected authors’ works.

To suggest that WG 8.2 research might benefit from drawing on a wider range of social theory, however, is not to belittle the current level of usage. As a comparison of Tables 2 and 4 indicates, papers at WG 8.2 conferences generally cite social theorists more frequently than is typical in the IS field as a whole (assuming that *MIS Quarterly* and *Journal of Management Information Systems* are not unrepresentative). The total number of citations of the four social theorists in WG 8.2 conference proceedings also exceeds that for all articles in management journals discussing information systems covered by the ProQuest search.

Some indication that this is a distinctive characteristic of WG 8.2 is given by a comparison of the citation density of proceedings for conferences held jointly with other IFIP working groups (Atlanta 1996 with WG 8.1 and Helsinki 1998 with WG 8.6). This shows that the number of social theorists cited in papers at these conferences was lower than the preceding or following WG 8.2 conferences. Without access to membership lists for the respective Groups, it is not possible to confirm whether this is due to a lower number of social theorists being cited in papers by members of other Groups, but these

results would suggest that this was the case. The observations of Keen (1991) in comparing the WG 8.2 and ICIS (International Conference on Information Systems) conferences held in Copenhagen in December 1990 would also seem to support the view of WG 8.2 as giving considerably greater attention to social theory than is typical in the IS field.

The citing of social theorists is not a universal characteristic of all WG 8.2 conference papers, however. With an average of just over two references to social theorists per paper, but more than 80% of papers at some conferences having no such citations, references to social theorists are spread fairly thinly, with the majority of references provided by only a few papers. Less than 10% of papers, for example, cited more than five social theorists.

Nor are high rates of citation of social theorists typical of all WG 8.2 conferences, even if the effect of joint conferences is removed. While the “social citation density” has generally increased over time, some conferences stand out as having had particularly high rates. In this respect, the legendary status of the 1984 Manchester conference would seem deserved, at least in terms of the interest in social theory shown in the papers presented there. This may be related to the conference theme, as the other “methodological” conferences, Philadelphia and, to a slightly lesser extent, Copenhagen also showed a relatively high level of citation of social theorists. The high citation rates at the Cambridge conference may reflect the presence of Bruno Latour as a plenary speaker, which may have been expected to attract submissions from authors interested in, and hence citing, his work and that of other Actor Network theorists.

Following comments by Fitzgerald et al. (1985) and by Keen, it would also seem that there may be a geographical difference in the rate of citation of social theorists. Thus there is a slightly lower rate of citation of social theorists in papers presented at WG 8.2 conferences held in the USA, which typically attract a higher proportion of U.S.-based authors, and in papers by U.S.-based authors. Whether this reflects a more powerfully-institutionalized orthodoxy in the IS research community in the USA, however, or a greater receptiveness to social theory amongst non U.S.-based researchers cannot be decided from this analysis. It is also the case that a number of US-based authors have been among those most frequently and consistently citing social theorists in their WG 8.2 conference papers, so any restrictive effect of theoretical orthodoxy in the USA is clearly not universal.

As quite a few researchers have papers in more than one volume of proceedings, it is also evident that certain individuals, although not necessarily all those who have presented more than one paper, have made a distinctive contribution to the citation pattern of the WG 8.2 conferences. While it would not be appropriate to identify specific individuals, it is possible to discern at least two types of such contribution. One demonstrates an admirable, if sometimes lonely, dedication to work drawing on the same few theorists over a number of years, while others show a greater eclecticism. It is not clear, however, that either type could be said, on the basis of the citation analysis, to be significantly more influential than the other. Thus, while the iconoclasts have not always been successful in promoting wider recognition of the theorists on whom they have focused, the eclectics might be seen as simply following research fashions (Abrahamson 1996).

Relatedly, it may be questioned to what extent citation is an appropriate measure of influence. An Actor Network analysis, for example, might identify certain references as being constructed as *obligatory points of passage* for the WG 8.2 community, or particular sub-groups within it. Citations thus become not a source of insight, but a badge of membership. Although the citation count on its own does not provide enough evidence to substantiate more than a general impression, it would appear that this may be particularly the case with certain methodological references, especially Yin (1984). Although, as explained, such references were not included in the citation count, 25 references to Yin were found (which would make him the third most cited author), all of which were to the 1984 book on case study research (or later editions). Given the particular positivist approach to case research this advocates, which would not seem always to sit easily with the interpretive orientation of some of the papers in which it is cited, there may be thought to be an element of tokenism in citing the work in some cases. A similar process of obligatory citation may also be conjectured for a number of other authors included in the analysis. For example, almost all citations of Berger and Glaser were to *The Social Construction of Reality* (Berger and Luckmann 1967) and *The Discovery of Grounded Theory* (Glaser and Strauss 1967) respectively.

The use of citations as an indication of the influence of particular authors would also seem to assume that the referenced works have contributed significantly to the research. Even if citing a work is not just tokenism, however, it is not clear that the inclusion of specific references necessarily means that they have always been understood, or perhaps even read. Given the breadth of potential sources for IS research, it would seem likely that some authors are probably encountered primarily through, sometimes excellent, secondary works. In the absence of the time and resources to pursue all of the material back to the originals, there may be a temptation to assume that the secondary works provide an accurate understanding, especially if this helps to simplify the argument. This is not to say that the reading of an original source ensures that it is understood either. As Jones (1999b) has argued in relation to Giddens's Structuration Theory, for example, some of its uses in the IS field appear to conflict with key aspects of Giddens's writing.

On the other hand, depending on citations misses out on two potentially important forms of influence: via other sources or in terms of a general appreciation whose origins may not be specifically acknowledged, or necessarily even recognized. In the first respect, the exclusion of management and IS references from the analysis may have disguised significant indirect influences. For example, the contribution of some secondary sources—Boland (1985) on phenomenology or Lyytinen and Klein (1985) on Habermas, to pick two examples from WG 8.2 proceedings—should not be under-rated. Perhaps more significantly, the unacknowledged or unrecognized contribution of theorists may indicate a more profound degree of influence than the citation of original works. Thus when the ideas of a social theorist have been sufficiently institutionalized that their origins are no longer considered worthy of note, they become part of the tacit knowledge of the field (Latour 1987).

Such a development could be seen as a welcome sign of maturity in the IS field, indicating the establishment of at least some element of the cumulative knowledge tradition that authors such as Checkland and Holwell (1998) suggest is essential to its future as a discipline. Thus the decline in references to Habermas could indicate that his ideas are now "taken as read" by WG 8.2 members. The explicitly critical tone of parts

of the Group's "Scope and Aims" statement, for example, the reference to critical and ethical discourses, might be seen to support this view.

As has been noted, however, the evidence of the citation analysis could equally lend support to a rather different view of the field, in which the absence of reference to primary social theoretic literature indicates lack of awareness and faddishness rather than institutionalization. Moreover, whether it is desirable, let alone possible, to establish a cumulative knowledge tradition in the IS field is itself open to debate, as the parallel discussion in the organization theory field indicates (Pfeffer 1995; Van Maanen 1995a, 1995b). The continuing diversity of the pattern of citations at WG 8.2 conferences and the absence of any single dominant approach may be seen as a sign of health, as much as a cause for regret.

That there is no single dominant approach, however, does not imply that there may be no groupings of citations. Thus, accepting that the citation data is not able to assess the indirect influence of social theorists, a number of different "schools" of WG 8.2 research may be identified. The primary grouping from this point of view is, evidently, between those WG 8.2 researchers who cite social theorists in their work and those who do not, with the former being slightly in the majority over the course of the Group's history. Among the former, the first significant grouping from an historical viewpoint was of those drawing on the work of Habermas. Interest in the work of Giddens emerged soon afterwards. Although co-cited in some papers, it is possible to distinguish between authors whose work has predominantly cited one or the other, with the latter being the slightly larger group. Foucault was first cited in a WG 8.2 conference paper in 1987, but it was not until 1993 that a significant number of papers drew on his work. Perhaps the clearest indication of a new grouping is that of the Actor Network theorists. First cited only in 1994, Latour has now become the third most cited social theorist. This may, as has already been noted, be attributable, in part, to his plenary paper at the Cambridge conference, but the interest has been maintained subsequently. References to the work of Latour are also associated with significant co-citation of other Actor Network theorists, especially Callon and Law, such that both have now received 10 citations in WG 8.2 conference papers. In no case, however, are either Callon or Law cited in papers not also citing Latour. Such a clear pattern of co-citation is not found with any other social theorists.

Given the evidence of the journal analysis that WG 8.2 conferences appear to have given greater, and earlier, attention to social theorists than is typical in the IS field, therefore, the Group's position as pioneers in the use of social theory would seem to be supported. As the citation analysis does not consider subsequent citation of WG 8.2 conference papers at later conferences, however, it is not possible to substantiate the claims of Klein (1999) regarding the influence of particular WG 8.2 papers or whole conferences on the pattern of subsequent research. Moreover, even if the analysis may be seen to indicate that WG 8.2 conferences have been successful in creating a focus for discussion of social theory in IS research, it is not clear whether any influence that this may have had on the field has been through the conferences themselves or through the writing of WG 8.2 authors in other venues. The success of WG 8.2 members in winning best paper awards at ICIS and *MIS Quarterly* may be more effective in creating wider awareness of social theory than discussion within the WG 8.2 community.

5. Conclusions

The reference to *The Ruba'iyat of Omar Khayyam* in the title of this paper was chosen, long before the citation analysis was completed, because of its ambiguity. Depending on where you end the quotation, it can be seen to comment on ephemerality of interest in social theory or on the enduring contribution of earlier work. As is so often the case, however, the evidence of the analysis provided no conclusive support for either position. In part, this reflects inherent limitations of such bibliographic measures as indicators of influence (see, for example, Johnson and Podsakoff 1994), but also the absence of an obvious pattern in the data.

Clearly, moreover, the present analysis offers only a partial, and arguably oversimplistic, view of the theoretical influences on WG 8.2 research, and there is undoubtedly considerable scope for its refinement and extension. For example, this might involve the further analysis of proceedings to consider the disciplinary basis of all references; a co-citation analysis to identify theoretical clusters; a similar detailed analysis of a number of leading IS journals to enhance the comparative exercise; or an analysis of the disciplinary backgrounds of paper authors and plenary speakers. While such additional investigations might provide a more complete picture of WG 8.2 research, however, it would be surprising if they were to alter significantly the broad outline revealed by the present study.

This suggests that WG 8.2 conferences have been notable for the extent to which the papers have drawn on social theory and that concern with social theory has generally grown over time. Whether the citations indicate a cumulative tradition, or perhaps a number of such traditions, or whether they illustrate a faddish fluctuation of interests over time is much more difficult to assess. Without detailed analysis of individual papers, for example, it is not possible to identify whether a decline in citations reflects amnesia rather than institutionalization, or an increase reflects fashionable tokenism or a significant growth in influence.

The variation in citations over time also shows no consistent trend. Thus, while the relative decline in the number of citations of Habermas and the recent surge of interest in Actor Network theorists might be seen as evidence of a shift in fashion, it is not as if Habermas is no longer cited or individual Actor Network theorists dominate the citations in an unprecedented way. Interest in different social theorists, at least as indicated by citations of their work, have clearly changed over time, but not in a systematic way, nor such that it is possible to conclude that there has been a significant and irreversible shift in the theoretical interests of WG 8.2.

If there are some very general patterns to be identified from the analysis, they might be that WG 8.2 research has drawn most strongly on social constructionism, broadly defined, with a significant input from Critical Social Theory, or Habermas at least, and, lately, Actor Network Theory. Alternatively it may be noted that there are some areas of social theory, such as the psychoanalytical literature (only one reference each to Freud and Jung, none to Kristeva, Lacan, or Levinas), that appear to have had a perhaps surprisingly limited influence in WG 8.2. As with the less-cited authors discussed above, this would seem to suggest opportunities for the Group's future theoretical extension, the pursuit of which could contribute to the maintenance and enhancement of WG 8.2's reputation as a source of theoretical innovation in the IS field.

As a final note, the whole of this paper may be seen to be predicated on the assumption that the citation of social theorists by IS researchers is “a good thing” and that higher social citation densities at WG 8.2 conferences, to the extent that they are indicative of a greater awareness and understanding of social theory, should be welcomed. While the analysis presented in this paper suggests that this view may be accepted by at least some significant proportion of the WG 8.2 community, it might be argued that there are more important issues for IS researchers to attend to. Recent concerns with “relevance” to business practitioners (Senn 1998) and “practice driven research” (Zmud 1998), for example, might seem to question the value of researchers devoting their attentions to (obscure) social theorists, especially those critical of mainstream management thinking. While, as Keen (1991) argues, there need not be a conflict between relevance and social theory and that practitioners are not necessarily antipathetic to ideas that challenge their assumptions, the priorities and concerns of practitioners may not typically embrace a broad interest in social theory.

WG 8.2 need not be defensive about its use of social theory, though, but should regard it as a valuable resource in the promotion of informed and constructive debate with both practitioners and other IS researchers. Engagement with theoretical debates would also seem necessary if IS research is to be seen as having a contribution to make to other disciplines. The question for IS researchers, therefore, is not whether they should engage with social theory, but how to do so. The evidence of this paper would suggest that WG 8.2 has been a conducive environment for such engagement and has every opportunity to continue this distinctive role in the future.

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About the Author

Matthew Jones is a University Lecturer in Information Management at the Department of Engineering and the Judge Institute of Management Studies at the University of Cambridge. He previously held postdoctoral positions at the universities of Reading and Cambridge, where he was involved in the development of computer-based models for public policy decision making. His current research interests are concerned with the social and organizational aspects of the design and use of information systems and the relationship between technology and social and organizational change. Matthew can be reached by e-mail at m.jones@jims.cam.ac.uk.

Appendix 1

Frequency of Citation of Other Social Theorists in WG 8.2 Proceedings, 1979-1999

Number of papers citing	
1	Aristotle; Arrow; Axelrod; Barnes; Bartlett; Bauman; Bergson; Bloor; Capra; Carnap; Chardin; Dandeker; Danzinger; Deleuze and Guttari; Dilthey; Dubinskas; Eagleton; Elias; Freeman; Freire; Freud; Friedmann; Fromm; Gleick; Greimas; Grice; Goleman; Hesse; Hirsch; Ihde; Illich; Jung; Koestler; Laclau; Laing; Leibniz; Locke; Lukacs; Lefebvre; Malinowski; McLuhan; Mumford, L; Myers; Nagel; Parsons; Pascal; Perez; Piaget; Pinch; Plato; Prigogine; Rawls; Rousseau; Ryle; Soja; Teece; Thomas, WI; Varela; Vygotsky; Waddington; Whitehead; Whyte; Zerubavel; Znaniecki; Zukav
2	Arendt; Baudrillard; Becker; Bhaskar; Boguslaw; Coase; Csikszentmihalyi; Evans-Pritchard; Galtung; Gramsci; Hacking; Hempel; Horkheimer; James; Kant; Knight; Lakatos; Luhmann; Machlup; Marcus; Marx; Merleau-Ponty; Radnitzky; Toulmin; Weber; Winch
3	Agar; Austin; Bernstein; Blumer; Boyer; Bruner; Chomsky; Eco; Garfinkel; Gergen; Haraway; Hughes; Leontjev; Marcuse; Mead; Strauss; von Hippel
4	Akrich; Bourdieu; Bunge; Derrida; Douglas; Kelly; Maturana
5	Bell; Bijker; Clifford; Collins; Ellul; Feyerabend; Heidegger; Husserl; Lyotard; Ricoeur; Rorty; Schutz
6	Apel; Goffman; Lakoff; Mackenzie; Searle
7	Bateson; Crozier
8	Kolb; Wittgenstein
9	Kuhn; Polanyi; Winner