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## A Discipline Divided: Globalization and Parochialism in Information Systems Research

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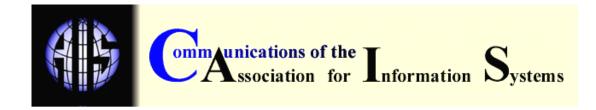
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# A DISCIPLINE DIVIDED: GLOBALIZATION AND PAROCHIALISM IN INFORMATION SYSTEMS RESEARCH

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#### **ABSTRACT**

This research note examines an apparent paradox in Information Systems (IS) research. This paradox relates to the parochial nature of much of the published IS research (both in terms of the chosen journal outlet and the literature cited), notwithstanding the global nature of the phenomena being investigated. The motivation behind this paper is to raise awareness within the IS academy concerning the global nature of our field, the applicability - or otherwise - of our research results in widely differing contexts, and the limited attention currently given to literature published elsewhere in the world. In line with the stated purpose of *Communications of the AIS*, this paper aims "to foster the free flow of ideas within the IS community" and seeks to encourage debate on this important topic.

It investigates the paradox of globalization and parochialism in IS by reviewing author 'nationality' in four leading IS journals over a seven-year period (1994-2000), and by reviewing the 'nationality' of the literature cited by these authors. Two of the journals are published in the USA and two are published in Europe. Despite apparent recognition of increasing globalization in our field, brought about – in part at least – by information technology (IT), the data provide firm evidence that the IS discipline is marked by a distinct parochialism along national, or at least, regional lines. A reorientation appears to be required if leading IS journals are not to continue to be the unwitting mouthpieces of unwitting researchers, publishing the results of partial, culturally biased research. The findings also contain profound implications for published material based on citation analyses and on our understanding of what constitutes the appellation 'international' in our discipline.

**Keywords**: Information Systems research; Information Systems journals; globalization; citation analysis; communication and diffusion of research findings.

#### I. INTRODUCTION

Considerable attention was paid in the past to various reviews of research and researchers in the Information Systems (IS) field. For example, for approximately two decades, many studies of aspects of the IS literature appeared: key IS management issues [e.g., Watson *et al.*, 1997]; publishing patterns of IS academics [e.g., Jackson & Nath, 1989; Hardgrave & Walstrom, 1997]; citation patterns [e.g., Culnan, 1986, 1987; Holsapple, *et al.*, 1994]; research productivity [e.g., Im, *et al.*, 1998a,b]; institutional profiles [e.g.,Vogel & Wetherbe, 1984]; journal rankings [e.g., Hamilton & Ives, 1983; Whitman, *et al.*, 1999]; journal popularity [e.g., Mylonopoulos & Theoharakis, 2001], and research methods in use [e.g., Mingers, 2001]. Such reviews as these are not the sole province of IS, however. Similar studies were undertaken in related fields such as management [e.g., Baruch, 1999]; marketing [e.g., Niemi, 1988; Hult, *et al.*, 1997]; finance [e.g., Klemkosky & Tuttle, 1977], and the sociology of science [e.g., Lindsey, 1980].

In conducting such reviews as these, however, relatively less attention was paid to some of the taken-for-granted assumptions upon which analyses are made and conclusions drawn. For example, there has been relatively little actual debate about which are "the leading journals" in the IS field. After all, or so it is argued, a consensus on such matters will be reached as a result of "the collective viewpoints of the main stakeholders in IS research" [Im, et al., 1998b; p. 13]. While there are dissidents [e.g., Guimaraes, 1998] who remind the mainstream (sic.) that there are other journals to consider, these "journals ... are not well known to the general IS academic community". Indeed, their inclusion in such reviews would "increase superficiality" and "decrease confidence" in the results [Im, et al., 1998b; p. 13]. Conversely, however, a recent large scale survey (N=979) of the IS academy world wide, undertaken by Mylonopoulos and Theoharakis [2001], highlighted the point that some leading journals in one Region may not enjoy the same visibility elsewhere. For example, the European Journal of Information Systems and Wirtschaftsinformatik, were ranked third and twelfth respectively by Europeans. Americans ranked the former thirteenth, and the latter hardly rated a mention on the part of respondents from either the Americas or Asian Regions, and remained unranked.1

But who is "the general IS academic community" and who are "the main stakeholders" in an age of globalization? While the European and Scandinavian IS communities would recognize – entirely appropriately and expectedly – *The European Journal of Information Systems* and *The Scandinavian Journal of Information Systems* as leading journals, for example, there may be those in other communities who would not recognize them as such. Similarly, empirical evidence shows that "leading" IS journals such as *MIS Quarterly* and *IS Research* were insufficiently well known even to be rated by approximately one-third of the German-speaking respondents to a recent survey of the European IS research community [Avgerou, *et al.*, 1999]. While some looked at the question of nationality balance in IS journals [e.g., Suomi, 1993] and related fields [e.g. Baruch, 1999], the extent of regionalism as against globalization in IS publications is a relatively under-researched issue.<sup>2</sup>

In the spirit of recent work by the social theorist Ulrich Beck, this research note argues against such parochialism and for a more global stance to our research and publications. In the age of globalization (the "second modernity"), Beck argues that we should no longer base our analysis on assumptions that may have held true in the "first modernity" where we "live and act in the self-enclosed spaces of national states and their respective national societies" [Beck, 2000, p. 20]. Beck argues that by taking a localized stance, perhaps unwittingly, our actions may well result in unintended consequences in the wider, international community. Assumptions that localized thinking or results hold true in different cultures<sup>4</sup> and communities

<sup>&</sup>lt;sup>1</sup> In that the journal *Wirtschaftsinformatik* was not listed in the top 50 journals in either Region.

<sup>&</sup>lt;sup>2</sup> A comparative study of research patterns in American and European Management journals was, however, undertaken [cf., Collins, *et al.*, 1996]

<sup>&</sup>lt;sup>3</sup> See, for example, Walsham [2002] for reference to Beck's work, and a consideration of cross-cultural conflict and contradiction in the context of international software production.

<sup>&</sup>lt;sup>4</sup> The very notion of 'culture' is problematic and can be considered at very different levels, e.g., national, regional, organizational and sub-organizational [see, for example, Galliers, 2003; Frost, *et al.*, 1985, Huang, *et al.*, 2003 respectively]. In addition, consider, for example, the very notion of 'best practice', which underlies much IS research that relies on the identification of critical success factors [Rockart,

smacks of the kind of scientific imperialism that would appear to be inappropriate in an increasingly global society [Galliers, 1995; 1999]. A parallel argument is developed by Gibbons, *et al.* [1995] in proposing what they term "Mode 2" or trans-disciplinary research, as against the "self-enclosed spaces" of discipline-based "Mode 1" thinking. It is in the less confined "space" of trans-disciplinary research that new lessons will emerge in their view.<sup>5</sup>

This research note raises a word or two of warning to the IS research community in the context of globalization, or rather, 'globality'. It does so by analyzing 'nationality' of

- (1) the editorial boards,
- (2) the authors of papers, and
- (3) the work they cite in four leading (sic.) IS journals during the period 1994-2000.

The remainder of this research note is structured as follows: Sections II and III describe the research method adopted and the data gathering and analysis process. A discussion of the main findings and their implications for the global IS academy are to be found in Section IV.

#### II. METHOD

Four high profile journals in IS were selected, and data were gathered on papers published in those journals over a seven-year period (1994-2000). The key dimensions of the analysis were: nationality of journal, nationality of author, and nationality of journal cited. Nationality in each case is defined below. The four journals chosen were *Information Systems Research* (ISR), *MIS Quarterly* (MISQ), *Information Systems Journal* (ISJ) and *Journal of Strategic Information Systems* (JSIS). ISR and MISQ are consistently rated highly within the North American IS academic community [e.g., Hardgraves & Walstrom, 1997; Im, *et al.*, 1998b; Mylonopoulos & Theoharakis, 2001]. Similarly, ISJ and JSIS are highly regarded in Europe and, to a somewhat lesser extent, also in Asia [e.g., Avgerou, *et al.*, 1999; Mylonopoulos & Theoharakis, 2001].

Three hypotheses were tested:

- 1. Null hypothesis: nationality of journal is independent of nationality of author.
- 2. Null hypothesis: nationality of journal cited is independent of nationality of author.
- 3. Null hypothesis: nationality of journal cited is independent of nationality of journal.

In addition, any perceivable trends in the data were analyzed.

#### **JOURNAL 'NATIONALITY'**

To define the 'nationality' of the four journals chosen, the editorial boards were analyzed over the seven-year period in question. Board members were classified as based in Europe, North America or the "Rest of the World" (ROW), according to the institution with which they were affiliated at the time. While it is likely that in these highly mobile times the citizenship of academics will not always accord with the country in which their institution is located, we argue that it is also likely that their views on appropriate methods and leading journals are more likely to mirror their host environment [cf., Whitman, et al., 1995]. Hence, we identified the host country of editorial board members' institutions, identifying the locus of board membership as a surrogate measure for journal 'nationality'. The make up of the editorial boards would undoubtedly change during the period under study, and the locus of board membership might well change in the light of growing awareness of IS research in other parts of the world. As a result, we looked for increasing internationalism in the Editorial Board membership over the review period.

<sup>1979].</sup> An underlying – and arguably false - assumption of such research is that what may lead to success in one context, will hold true in different contexts.

<sup>&</sup>lt;sup>5</sup> In a similar vein, Mingers [2001] argues for greater pluralism in research methods used in Information Systems.

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#### **AUTHOR 'NATIONALITY'**

Data were also gathered on the 'nationality' of the authors publishing in the four journals during the period 1994-2000. Again, institutional affiliation was taken as a proxy for the actual nationality of the author or authors. Each paper was classified as having authors who were from North America, Europe, and initially, "ROW" or International (the latter indicating a paper with multiple authors from more than one of the previous categories). As relatively few papers fell into the last two categories, however, these were later merged and the data summarized under three headings. This merger enabled robust results to emerge from the hypothesis testing.

#### 'NATIONALITY' OF JOURNALS CITED

The journal articles cited in each article published in the four journals during the period 1994-2000 were also analysed. Each reference was classified according to the "nationality" of the journal in which it was published, as European, North American, "ROW", or International. As 910 different publications were cited, it was not possible to conduct a detailed analysis of the make-up of the editorial board of each one. Instead, data were gathered on the country of publication of each journal, and the country where the editor was based, and a decision made on this basis. The International category allows for publications with different editions in different parts of the world.

#### **ANALYSIS**

Three Chi Squared tests were undertaken to test the independence of the three key concepts (nationality of journal, nationality of author, and nationality of journal cited). In addition, given the growing interest in IS and globalization [e.g., Walsham, 2001] and the increasing awareness of IS academics regarding the work of their colleagues from other Regions<sup>7</sup>, it might be expected that there would be less evidence of parochialism as we moved toward the new millennium. Thus, any trends in the data over the seven year period (1994-2000) were also analyzed.

#### III. RESULTS

As can be seen from Table 1, ISR and MISQ were classified as North American journals given the highly skewed representation of US institutions on their editorial boards. ISJ and JSIS were taken as examples of IS journals based outside North America, given ISJ's predominantly European representation and JSIS's more balanced, 'international' editorship.

Table 1. 'Nationality' of Editorial Board Members

Journal	European	North American	ROW
ISR	4-5	30-35	1-5
MISQ	3-9	21-33	2-9
ISJ	24-31	8-17	4-8
JSIS	18-23	15-18	9-13

Note: the ranges on the numbers indicate the maximum and minimum from the region during the 1994-200 time period

As is evident from even the most cursory look at the data summarized in Table 2, it is clear that the 'North American' journals studied (ISR and MISQ) publish primarily the work of North American authors, with very few European or ROW authors represented. Conversely, the two

<sup>6</sup> Note that books, and any items other than journal articles, were excluded from the analysis.

<sup>&</sup>lt;sup>7</sup> For example, with the advent of the Association for Information Systems and its three Regional Conferences: AMCIS, ECIS and PACIS.

'non- North American' journals (ISJ and JSIS) publish primarily the work of European authors, albeit to a lesser extent.

Table 2. 'Nationality' Of Authors

Journal	European only	North American only	'Other' <sup>8</sup>	Total articles
ISR	2 ( 2%)	59 (74%)	19 (24%)	80 (100%)
MISQ	4 ( 5%)	69 (83%)	10 (12%)	83 (100%)
ISJ	31 (49%)	13 (21%)	19 (30%)	63 (100%)
JSIS	30 (51%)	13 (22%)	16 (27%)	59 (100%)

We see a very similar pattern emerging with respect to citation patterns, as can be seen from Table 3. Approximately four in five journals cited in the two North American journals studied cited work that appeared in 'North American' journals. The bias toward North American research is also seen in the two 'European' journals studied, albeit less so – with two in three 'North American' journals cited. The percentage of 'North American' citations in MISQ and ISR varies in the range 72-84% each year during the period under investigation. The percentage of 'North American' citations for the two 'European' journals varies in the range 62-72%. Once again, there is no evidence of a trend during the period 1994-2000.

Table 3. 'Nationality' of Journal Cited

	European	North American	'Other'	Total
Journal				citations
ISR	15%	78%	7%	100%
MISQ	14%	80%	6%	100%
ISJ	29%	66%	6%	100%
<u>JSIS</u>	25%	68%	7%	100%

As indicated in Section II, three Chi Squared tests were undertaken to test the independence of the three key concepts (nationality of journal, nationality of author, and nationality of journal cited). The results are as follows and are unequivocal.

#### **TEST ONE**

Null hypothesis: nationality of journal is independent of nationality of author.

Chi Square calculated 151.1

Significance level 0.000 (to 3 decimal places)
Result Reject the null hypothesis

 $^{\rm 8}$  A combination of ROW and 'international' authors, as defined in Section II.

In analyzing the link between nationality of author and nationality of journal further we note that the proportion of papers in MISQ and ISR written solely by North American authors varies in the range 60-70% over the seven years analysed. The same proportion in ISJ and JSIS varies from 20 to 30%. The proportion of papers in ISJ and JSIS written solely by European authors varies in the range 40 to 50%. Conversely, the proportion of papers written solely by Europeans in MISQ and ISR never exceeds 5%. There is no evidence of a trend over the period.

#### **TEST TWO**

Null hypothesis: nationality of journal cited is independent of nationality of author.

Chi Square calculated 90.7

Significance level 0.000 (to 3 decimal places)
Result Reject the null hypothesis

In analyzing the data with respect to nationality of author and nationality of journal cited, it is clear that all nationalities of authors are more likely to cite papers that appeared in North American journals. Having said that, European authors tend to cite a greater proportion of the European literature. Again, however, there is no evidence of a trend over the seven years analyzed.

#### **TEST THREE**

Null hypothesis: nationality of journal cited is independent of nationality of journal.

Chi Square calculated 293.0

Significance level 0.000 (to 3 decimal places)
Result Reject the null hypothesis

We investigated the link between nationality of journal and nationality of journal cited further. The proportion of citations of North American journals in ISJ and JSIS varies in the range 62 to 72% over the seven years analysed, while the proportion of citations of North American journals in MISQ and ISR varies in the range 72 to 84%. Thus, there is a preponderance of North American literature being cited, although, as indicated, the level of citation is greater in North American journals. We also tested the data to see whether the situation improved during the seven year period up to 2000. There is no evidence of any such trend.

In each case, then, we conclude that indeed a relationship exists between the three key concepts analyzed. In other words, despite our pretensions as a global academy, we strongly tend towards parochialism. First, we tend to publish in our 'home' journals rather than further afield. Second, we tend to cite literature from our own Region at the expense of a more global outlook. Third, on this evidence at least, our highly respected journals would find it hard to claim that they are in any sense international. Rather, there is apparently something of a 'closed circle' in evidence.

#### **IV. DISCUSSION**

The data presented as a result of this study provide a clear indication of the parochialism many suspected exists in, for example, the literature we draw on to inform our research efforts, and in our publication patterns. Despite the growing internationalization of the Information Systems discipline itself, and despite our growing awareness of the global effects and consequences of Information and Communication Technologies, we remained curiously wedded to home grown attitudes and perspectives. Indeed, the data presented here reflect little in the way of trends away from such conservatism and parochialism in recent years. Now, it could easily – and reasonably – be argued that North America has a greater proportion of active IS researchers than do other regions in the world. Having said that, it is undoubtedly the case that there are pockets of large numbers of active IS scholars in for example, Germany, France, the Netherlands, and Scandinavia, just to focus on Europe alone.

<sup>9</sup> Bearing in mind, for example, the relative numbers of AIS members in the three Regions.

Thus, the clear dangers that are present in focusing on research and attitudes in one's own community need to be addressed.

First, the development of the discipline itself could well be retarded by our failure to appreciate the work of colleagues elsewhere in the world. If we accept the 'Mode 2' and 'globality' arguments of Gibbons, et al. [1995] and Beck [2000], then there would be less likelihood of new knowledge being created by remaining in our "self-enclosed spaces". Second, and this is again related to Beck's [2000] analysis, journal editors may well be the unwitting mouthpieces of unwitting researchers, publishing the results of partial, culturally-biased accounts. There appears, therefore, to be a requirement for the Information Systems academy to make a concerted effort to seek out relevant research undertaken in other Regions. Even when doing so, we should be considerably more reflexive and less assured when interpreting data that are situated, not only in terms of location, but also interpretation.

Here are some tentative proposals for doing so:

- 1. Each of us might usefully reflect on the 'situatedness' of our arguments and empirical data when undertaking and publishing our research. We might usefully attempt to question our taken-for-granted assumptions about the appropriateness and relevance of our arguments in different cultures.
- 2. It may prove insightful, in line with proposal 1, for authors actively to seek input from colleagues located in different regions of the world, particularly with respect to relevant literature emanating from, and research being undertaken in those particular regions.
- 3. Journal editors might usefully reflect on how representative their editorial boards are from international, cultural, and diversity perspectives, and refresh their boards accordingly.
- 4. Similarly, Journal editors may wish to consider appointing regional editors (e.g., along the lines of the AlS's three Regions), such as has been the case with JSIS since its inception, and more recently, with the *Journal of Information Technology*. <sup>10</sup>
- 5. When obtaining reviews of submissions to international conferences and journals, editors may usefully consider ensuring that reviewers are not drawn from a particular community but are more internationally and culturally representative.
- 6. Greater emphasis might be given to understanding of cross-cultural issues as they relate to the field of Information Systems (and business studies more generally). This might take the form of a reconsideration of core curricula in the field, and special issues on related topics of our key journals, for example.
- 7. We, as an academic community, might usefully apply pressure to ensure that our libraries have access to journals and research working papers that are more internationally and culturally representative.
- 8. Similarly, opportunities might be taken to attend regional conferences in our field outside our own region (e.g., regional conferences supported by AIS such as PACIS, ECIS, AMCIS, ACIS and BITWorld).<sup>11</sup>
- 9. As a result, international networks may be more readily formed of scholars with shared interests but with different perspectives and experiences. Joint research, spanning national boundaries would more likely ensue as a result, and data collected locally could, as a result, be more readily interpreted in context: a paradox of globalization is the need for deep understanding of local circumstances and contexts.

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<sup>&</sup>lt;sup>10</sup> There is a paradox in this recommendation: were journal editors to rely entirely on regional reviews, this might lead to an *increase* in parochialism. Notwithstanding, the more we understand the differing views emanating from different regions and cultures, the more it is likely that we will break down parochial attitudes, in the longer term at least.

<sup>&</sup>lt;sup>11</sup> For data on papers presented and associated citation patterns during the first 10 years of ECIS, see Galliers & Whitley [2002].

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In line with proposal 8, organizers or regional conferences might usefully think of ways and means of encouraging greater participation from traditionally under-represented nations in their region. For example, inclusion of Francophone and German-speaking nations in ECIS, and consideration of extending invitations to Eastern European, African, and Middle-Eastern colleagues, might be debated and acted upon. Similarly, greater involvement of Latin American and Caribbean colleagues at AMCIS could usefully be encouraged, as could under-represented nations at PACIS.

We are sure that others in the international Information Systems academy will offer differing views about what can and should be done to enable the development of the IS discipline in a global context.

The Editor of CAIS invites e-mails to cais@cgu.edu that he will publish as Letters to the Editor to begin the debate.

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#### REFERENCES

Avgerou, C., J. Siemer and N. Bjorn-Andersen (1999). The Academic Field of Information Systems in Europe, *European Journal of Information Systems*, 8(2), 136-153.

Baruch, Y. (1999). Global or North American: a Geographical Based Comparative Analysis of Publications in Top Management Journals, Paper Presented at the Academy of Management Conference, Chicago.

Beck, U. (2000). What is Globalization? Cambridge: Polity Press.

Collin, S-O., U. Johansson, K. Svensson and P–O. Ulvenblad (1996). Market Segmentation in Scientific Publications: Research Patterns in American and European Management Journals, *British Journal of Management*, 7(2), 141-154.

Culnan, M. J. (1986). The Intellectual Development of Management Information Systems, 1972-1982: A Co-Citation Analysis, *Management Science*, 32(2), 156-172.

Culnan, M. J. (1987). Mapping the Intellectual Structure of MIS, 1980-1985: A Co-Citation Analysis, MIS Quarterly, 11(3), 341-353.

Frost, P., L. Moore, M. Louis, C. Lundberg & J. Martin (eds.), *Organizational Culture*, London: Sage.

Galliers, R. D. (1995). A Manifesto for Information Management Research, *British Journal of Management*, Special Issue, 6, December S45-S52.

Galliers, R. D. (1999). Information Systems in an International Context, *The DATA BASE for Advances in Information Systems*, (30)1, Winter, 7-9.

Galliers, R. D. (2003). Information Systems in Global Organizations: Unpacking 'Culture', in S. Krishna and S. Maddon (eds.) *The Digital Challenge: IT in the Development Context*, Aldershot: Ashgate (in press).

Galliers, R. D. & E. A. Whitley (2002). An Anatomy of European Information Systems Research. ECIS 1993 – 2002, Department of Information Systems Working Paper #110,

London School of Economics, University of London, April, <a href="http://is.lse.ac.uk/wp/pdf/WP110.PDF">http://is.lse.ac.uk/wp/pdf/WP110.PDF</a>

Gibbons, M., C. Limoges, H. Nowotny, S, Schwartzman, P. Scott and M. Trow, (1995). *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*, London: Sage.

Hamilton, S. and B. Ives, (1983). The Journal Communication System for MIS Research, *DATA BASE*, Winter, 3-14.

Hardgrave, B. C. and K. A. Walstrom, (1997). Forums for MIS Scholars, *Communications of the ACM*, 40(11), 119-124.

Holsapple, C., L.Johnson, H. Manakyan, and J. Tanner (1994). Business Computing Research Journals: A Normalized Citation Analysis, *Journal of Management Information Systems*, 11(1), 131-140.

Huang, J. C., S. Newell, R. D. Galliers & S - L. Pan (2003). Dangerous Liaisons? Component-Based Development and Organizational Sub-Cultures, *IEEE Transactions on Engineering Management* (to appear).

Hult, G. T., W. T. Neese, and R. R. Bashaw, (1997). Faculty Perceptions of Marketing Journals, *Journal of Marketing Education*, Spring, 37-52.

Im, K. S., K. Y. Kim, and J. S. Kim, (1998a). An Assessment of Individual and Institutional Research Productivity in MIS, *Decision Line*, 29(1), 8-12.

Im, K. S., K. Y. Kim, and J. S. Kim, (1998b). A Response to "Assessing Research Productivity: Important but Neglected Considerations, *Decision Line*, 29, September/October, 12-15.

Jackson, W. M. and R. Nath (1989). Publication Patterns of MIS Researchers, *Interfaces*, 11(2), 15-20.

Klemkosky, R. and D. Tuttle, (1977). The Institutional Source and Concentration of Financial Research, *Journal of Finance*, 32(3), 901-907.

Lindsey, D. (1980). Productivity and Citation Measures in the Sociology of Science: The Problem of Multiple Authorship, *Social Studies of Science*, 10, 145-162.

Mingers, J. (2001). Combining IS Research Methods: Towards a Pluralist Methodology, *Information Systems Research*, 12 (3), 240-259.

Mylonopoulos, N. A. and V. Theoharakis (2001). Perceptions of Information Systems Journals: a Worldwide View, *Communications of the ACM*, 44(9), 29-33.

Niemi, A. W. (1988). Publication Performance of Marketing Departments: 1975-1985, *Journal of Marketing Education*, 10(2), 8-12.

Suomi, R. (1993). On the Nationality Balance of Authors and References in Selected MIS Journals, *Information & Management*, 24, 339-347.

Walsham, G. (2001). Making a World of Difference: IT in a Global Context, Chichester: Wiley.

Walsham, G. (2002). Cross-Cultural Software Production and Use: a Structuration Analysis, *MIS Quarterly*, 26(4), 359-380.

Watson, R. T., G. G. Kelly, R. D. Galliers, and J. C. Brancheau (1997). Key Issues in Information Systems Management: an International Perspective, *Journal of Management Information Systems*, 13(4), 91-115.

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