Inaugural Lecture

Information Systems and the Humanities: A Symbiotic Relationship?

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Abstract

The lecture explores the nature of the relationship between the study fields of Information Systems and the humanities. Although literature on Humanities Computing states in principle that there is a bi-directional, beneficial symbiotic relationship, most studies and reflections investigate only the application of information technology in the humanities. This suggests that the relation is commensalistic rather that mutualistic. However, studies do exist that implement theoretical constructs borrowed from the humanities in various aspects of Information Systems. Therefore, the speaker pleads that more recognition be given to the prediscipline of Humanities-enriched Information Systems and proposes theoretical and practical ways to make the field more independent.

Ekserp

Die lesing ondersoek die aard van die verhouding tussen die studievelde Inligtingstelsels en die humaniora. Hoewel literatuur oor Geesteswetenskaplike Rekenaarverwerking in beginsel ruimte vir 'n voordelige, tweerigting-verhouding laat, besin die meeste studies slegs oor die toepassing van inligtingstegnologie in die geesteswetenskappe. Dit suggereer dat die verhouding meer kommensalisties as mutualisties is. Tog bestaan daar studies wat teoretiese konstrukte, ontleen aan die geesteswetenskappe, in verskeie areas van Inligtingstelsels toepas en gebruik. Die spreker pleit daarom dat meer erkenning aan die voordissipline van Geesteswetenskaplik-verrykte Inligtingstelsels gegee word en stel teoretiese en praktiese maniere voor om die veld meer selfstandig te maak.

1. Introduction

According to the University's guidelines for inaugural speeches, this lecture should be fundamental and directed at the future. I shall attempt to meet these prerequisites by reflecting on certain aspects of the philosophy of science regarding Information Systems and by exploring the realm of the type of research that I plan to do in the near future. However, I would like to add another goal to this paper, namely to pay tribute to all my teachers and colleagues who opened windows on various aspects of science, thereby prompting the basic idea reflected in the title of this paper. The theme "Information Systems and the humanities" encompasses more than thirty years of my academic training and shaping as much as it is a statement of intent.

Therefore, before I continue, allow me to thank this network of academics, especially my teachers, colleagues and postgraduate students in the humanities, Theology and Computer Science of the former Potchefstroom University and in the schools of Information Technology at the University of Pretoria and the Vaal Triangle Campus (VTC) of the North-West University (NWU). In addition, I would also like to thank my dear wife and children, parents, family and friends who made many personal sacrifices to support my studies and research. I would also like to thank the management and administration of NWU (VTC) for appointing me as research professor and for making this ceremony and the reception afterwards possible. I cannot omit to mention the friendly and efficient help of the library staff in searching for relevant nuggets of gold that I needed to support my arguments. Finally, I would like to pay tribute to Prof Dewald Roode, regarded as the father of Information Systems (IS) research in South Africa, who passed away on 27 September 2009, less than three weeks after presenting a brilliant seminar on our campus regarding current issues and trends in Information Systems theory, philosophy and research. I used many of his ideas and references for the theoretical reflection in this lecture.

In this reflective paper, I shall endeavour to focus on the reflexive relationship between Information Systems and the humanities and, especially, to give recognition to one side of this synergy (the use of constructs of the humanities in the field of IS) that has been practised for many years without receiving sufficient acknowledgement. I trust that bringing this issue to the fore will create a debate on

the validity and maturity of the sub-discipline. According to O'Donovan and Roode (2009:32), "[t]he importance of dialogue as a process through which the [IS] discipline will grow cannot be overestimated". Therefore, such a debate could stimulate more research that consciously addresses and promotes this identified research focus. This wish is parallel to the one expressed by Kock (2009:414) with regard to the social sciences, and especially the enrichment of IS through Evolutionary Psychology. I believe that this type of meta-research is essential for the IS discipline because every research approach reflects ontological and epistemological assumptions, influences research questions and methodologies, and affects the outcomes and results (Chiasson et al., 2008:33). Reflection is also needed to uncover the nature of the IS discipline and to overcome ontological rifts between diverse communities of practice in IS research (O'Donovan and Roode, 2009:34, 37). Although Humanities-enriched IS may still be in a pre-disciplinary phase, scholars should look out for a "founding moment of rupture with the surrounding disciplines" (the inceptive moment when a new discipline is set apart) and foster initiatives to identify its own unique set of methods and practices, to build a community of teachers and researchers and to train its own "disciples" in order to make that moment arrive (Rockwell, 2002).

First, the paper clarifies the use of some terms such as the terms Information Systems, humanities and social sciences. This will be followed by an explication of the core issue, namely the difference between Humanities Computing and Humanities-informed Computing. Both sides of the mutual relationship will be discussed in some detail, and some directions for the way forward will be suggested.

2. Information Systems vs. information systems

Since this paper mainly deals with research issues, the term Information Systems (IS) (spelled with initial capital letters) is used to refer to the academic discipline that covers all aspects of information systems, the software products (spelled with initial small letters). IS is usually regarded as a social science as opposed to Computer Science and Information Science, which are usually classified as natural-mathematical and human sciences (cf. Buckland, 1999). However, it should be remembered that IS is also an interdisciplinary science that integrates knowledge

from algorithmic perspectives with applications in business, organization and society (Avison et al., 2008:7). The term Informatics is also sometimes used to describe IS, but it will not be used here, since it is often used in Europe as a synonym for Computer Science.

3. Humanities vs. Social and Natural Sciences

The characterization of IS as an interdisciplinary science with a mainly social focus sounds clear and sufficient. According to Oates (2006: 2), the discipline of Information Systems (IS) "is particularly concerned with the real-world social and organizational context in which information systems are developed and used", whereas Computing concentrates more on the technical aspects of software products. Oates uses the term Computing as a synonym for Computer Science, but in the rest of the paper it will be used as an umbrella term for Information and Communication Technology (ICT) disciplines, including Information Systems. According to Myers and Avison (2002:4), qualitative research methods were developed within the social sciences and are often used in the study of Information Systems.

If one worked with a clear and simple distinction between the natural sciences, which mainly use empirical approaches, and all other sciences, focusing on non-empirical points of departure, the issue regarding the place of IS in the realm of science would be resolved and would not need further discussion. However, the boundaries between these two groups have become blurred, especially after the rise of relativity theory, and the dichotomy is not clear anymore (Monod and Boland, 2007:136, 138; cf. Coyne, 1998 and Grassie, 1997). Jaspers (1960:101-110) already pleaded in 1960 that Technology be introduced at universities as an integrating force that could overcome the division between the natural sciences and the humanities. Making the issue even more complex is the fact that the humanities and social sciences cannot simply be bundled all together (although this is, probably, exactly what is often done when authors refer to IS as a social science) (cf. Klein and Hirschheim, 2008:297, who refer to "the inherent differences between the natural sciences and the social/cultural sciences"). According to IJ Kroeze (2009:9), the natural sciences mainly use empirical methods, while the humanities use rational methodologies and

the social sciences use both. Although this distinction is not without problems (it suggests, for example, that Mathematics should be regarded as a subject of the humanities), it sensitizes us to the differentiation between one group of disciplines, such as Psychology and Sociology on the one hand (the social sciences), and another group, such as Linguistics and Philosophy, on the other hand (the humanities).

For the past thirty years, much attention has been given to IS as a social science, and much has been published on the application of IS in the humanities, but the other side of the IS-humanities relationship has not received much conscious recognition. This gap in reflection and theory will be the focus of the rest of the paper. Avison et al. (2008:13) say that there is "no valid argument that IS should not benefit from other disciplines" and provide a list of theoretical constructs used in papers published in the *Information Systems Journal* during the past 17 years. A few of these theoretical constructs are directly related to the humanities, such as ethical theory, narrative thinking and theories of meaning, but the average number is limited (more or less eight out of fifty), and the issue is not discussed in depth. No differentiation is made between the humanities and social sciences.

Thinking about the conscious and purposeful adoption of constructs of the humanities in IS may require another "epistemological conversion" by many researchers – like the one many make from positivist to interpretive work, but this could help us to make sense of the "multiple socially constructed word-views" that we deal with and provide "building blocks which we could use to create legitimate, realistic and coherent worlds" (Shoib and Nandhakumar, 2009). "Conversion" may be a strong concept to use in this context, but one has to admit that it is difficult to change the fundamental assumptions on which different software development approaches are founded (Brown et al., 2004:4142). However, the wider trend towards multi-disciplinarity between Information Science, IS Management and the humanities (cf. Chua and Yang, 2008:2164) may make this process more acceptable and easier.

4. Humanities Computing vs. Humanities-enriched Computing

In any scientific discipline, an ongoing reflection about the discipline itself is necessary (Bryant, 2008:697). Such a debate about the nature and right of existence of IS has indeed been ongoing for many years (O'Donovan and Roode, 2002:26). The debate itself justifies the existence of the discipline because it proves that the discipline is alive and constantly in discussion with its sister disciplines about its place in an ever-changing landscape of research foci and boundaries (cf. Klein and Hirschheim, 2008:284; cf. Kock, 2009:403). With an apology to Descartes (who said, "I think, therefore I am"), we could say that a discipline exists if it thinks about itself. With more specific reference to the vast amount of research studies done on the essence of IS, we might even say, "IS thinks, therefore IS is." This process of reflection requires in-depth thinking and consideration. Prof Dewald Roode said the following during the seminar presentation referred to above: "Philosophical reflection on the foundations of the discipline of IS and its professional practices require us to raise philosophical questions. Some acquaintance with philosophical works is necessary!" (Roode, 2009:13). A community of practice and knowledge can not only provide critical mass, credibility and leadership, but also facilitate the much-needed processes of fundamental and incremental criticism (Klein and Hirschheim, 2008:289-290).

Therefore, having established that there is a symbiotic relationship between the humanities and IS, one should also ask the philosophical question of what the nature of the symbiosis is. (A symbiosis describes a reflexive relationship that may or may not be beneficial to both parties). Is it a mutualism where both parties benefit, or is it a commensalism where only one party benefits without harming the other party? One would trust that the relationship is not parasitic or amensalistic where one party is harmed while the other is benefited (parasitism) or unaffected (amensalism)! According to Kock (2009:395), the relationship between IS and other disciplines should, in general, be mutually beneficial, and IS could especially obtain "fresh new insights ... in connection with fields that bring in notions yet unexplored in information systems theorizing". Kock draws on Evolutionary Psychology to enrich IS theory, but one could also apply his idea to other groups of disciplines, such as the humanities. Bryant (2008:698) calls for IS to be "permeable" in its relationship to

social and humanistic disciplines (including Semiotics and Cultural Studies) so that terms and models may be "pushed" and "pulled" between them.

While examples of this relationship will be discussed in more detail in the next section, the fundamental and theoretical discussion in this part is necessary because the development of disciplines cannot be predicted or managed but takes places through a process of learning, tension and dialogue in an academic community (Roode, 2009:27-37). I hope to indicate that the humanities are as important as the social sciences in the study of Information Systems and that the time has arrived that we should give proper recognition to the symbiotic relationship as a mutualism.

The wide range of literature and research available on the application of IS in the humanities and the limited (almost absent) range of purposefully reflective work on the use of concepts of the humanities in IS suggest that, although the relationship is indeed symbiotic, it still tends to be more commensalistic than mutualistic. Humanities Computing (also called Digital Humanities) is the name of the discipline that studies the symbiotic relationship between Computing and the humanities (Orlandi, 2002). However, when one explores literature on this discipline, one mainly finds work on the use of IS (and other branches of Computing) to enhance the study of disciplines in the humanities, such as Language and Literature, History, Philosophy, the arts, etc. Disappointingly few studies are available that purposefully reflect on the other direction of the synergy. This situation creates the impression that only one partner in the symbiotic relationship (the humanities) receives all the benefits of the symbiosis, using Computing to "refurbish" the humanities (McCarty, 2002).

However, when one digs a little deeper with this question about the other side of the symbiotic relationship in mind, one finds quite a number of (almost hidden) surprises indicating that Information Systems are very often informed and enriched by the humanities too. A good name that would describe this side of the mutual interrelation would be Humanistic Computing/Informatics, but, unfortunately, this term is also used as a synonym for Humanities Computing (HC) (Aarseth, 1997). Although I will not go so far to suggest that IS is a science of the humanities, this lecture tries to correct the imbalance in the reflection on the topic by exploring existing research for

solid examples of *Humanities-enriched IS*. In order to be regarded as a discipline or sub-discipline, Humanities-enriched IS should refer to a coherent body of topics that are unique and typical of the subject matter (cf. Roode, 2009:26). After giving some examples of the well-recognised Humanities Computing below, the paper will bundle together some of the nuggets of Humanities-informed IS uncovered from seas of IS and HC information. To take the mining metaphor further, these pieces of research may be regarded as diamonds that have been spotted and polished by reviewers (cf. Straub, 2009:vii), and they could shiningly justify a call for more decisive research endeavours in this area.

5. Discussion of Humanities Computing

It is impossible to cover the amazingly vast field of IS applications in subjects of the humanities subjects in a short overview. Since that is also not the main focus of this paper, I will give a brief overview of some examples with references to the well-established field of Humanities Computing.

- **IS and Language**

Information systems have been used widely in Computational Linguistics to enhance the quantity and quality of explorations conducted. In studies on literature, the computer is often used to find themes and patterns that would be difficult or cumbersome for people to find. In this regard, it is also relevant to refer to the important work done at our institution by CText (Centre for Text Technology). The website of the centre (http://www.puk.ac.za/fakulteite/lettere/ctext/index_e.html) lists spelling and grammar checkers and programmes for web search, language acquisition and automatic translation as examples of technological text applications. Hoover (2007) provides some examples and guidelines for the use of electronic texts to enrich grammatical and literary studies.

- **IS and History**

Like in most other sciences today, retrieval systems are one of the most important applications of Computing in History. Access to old sources has become much

easier and building repositories of historical knowledge for future generations much more encompassing than ever before (cf. Cox, 2007 and Ayers, 1999).

- **IS and Art**

Many systems exist that assist artists in the visual and audio arts to edit, improve and speed up their creative work. Amongst others, Stone (2009) discusses pros and cons of the use of visualisation tools and the visualisation of colour in art. Murray (2009:60) refers to the creation of virtual worlds to augment the teaching of Art History.

- **IS and Philosophy**

It is rather surprising that this is the one aspect of the symbiotic relationship where the application of IS in the humanities discipline has not received much attention, while the other side has. Such an attempt (Philosophy in IS) is Monod and Boland's (2007:139) brilliant overview of the philosophy and epistemology of IS, in which they conclude that, especially in the US, IS is very much still captured in a positivist mode ("a sociology inspired by out-of-date physics"). Nel's (2007) argument that information technology (IT) may be regarded as an agent of postmodernism is an excellent example of IS in Philosophy. According to Wells (1996), many advances in IT are also a result of postmodernism. The exact reciprocal nature of these two concepts needs more in-depth study.

Two other fields of the humanities where information systems are used to make research more efficient are Theology and Law. Owing to time restrictions, however, these will not be discussed in detail here. Suffice it so say that information systems have been created in abundance to help theologians to study and analyse their sources, including holy texts and libraries of commentaries and reflective work. Looking at the other side of the relationship, one realises that both IS and religious studies have a directedness with regard to texts (sacred texts, business rules, etc.) and the need to analyse and understand these. Therefore, together with Literary Criticism and Law, they share the crucial need for hermeneutic principles and approaches, and could learn a lot from each other (cf. Grassie, 1997). Another commonality is the interest in connectedness. Religious studies look at people's

relationship with a Supreme Being and with each other. IS looks at ways to facilitate people's connectedness with each other and with organisations by building networks facilitated by computer software like e-mail, discussion groups, social sites, etc. However, this aspect may fall more within the social sciences than in the humanities. Computer programs that help academics in Law to find court cases easily and to assist practitioners to run their law firms also exist. Conversely, IT Law is already studied by legal schools and presented as courses in legal as well as IS curricula. These ideas are some pointers that may be used to direct future studies to uncover the bi-directional relationship in more detail. In the next section, examples and suggestions will be given of Humanities-enriched IS, with reference to Linguistics, History, Art and Philosophy.

6. Recognising Efforts to Enrich IS using Humanities-based Approaches

As indicated above, this paper would like to give recognition to efforts that enrich Computing (and especially Information Systems) using insights and approaches from the humanities. This could indicate a reciprocally beneficial relationship and synergy between these two groups of disciplines and motivate an invitation to interdisciplinary scholars to look for more possibilities to grow the IS discipline even further. According to Monod and Boland (2007:139), embracing conceptualisations borrowed from the social and human sciences is the only way to overcome "the syndrome of refusing to grow" in IS. This may be regarded as an attempt "to accept our responsibility to look out for the vitality of the field", suggested by Grover, Straub and Galluch (2009:vii), who report a general malaise about the field. Shoib and Nandhakumar (2009) also plead for inspiration from the arts to help IS scholars to come to terms with the pluralism that is inherent in the field. The examples and suggestions discussed below are indeed inspiring and indicate that substantial evidence of and for work in Humanities-enriched IS already exists.

- **Language and IS**

Coyne (1998) hinted that the symbiotic relationship between IS and Linguistics is mutualistic with a remarkable statement: "In fact, it is equally valid to say that information technology is the product of the working of language and texts...". Unfortunately, he does not elaborate on this idea. Some examples of interesting

applications of insights of the humanities exist in IS. For example, Pieter Joubert Senior, who opened my eyes to the humanities-to-IS direction in the symbiotic relationship, uses a linguistic approach to cross the bridge from simplified texts containing business rules to conceptual analyses of the business information systems to be created (Joubert, 2009). He combines morphological and syntactical analyses to understand and represent business rules. The application of ten language-based rules transforms the business rules into a table with a fixed format; the table is then rendered in a diagrammatical representation, which, in turn, can easily be converted into an entity-relationship diagram. Semantic roles, identified in functional grammars, may provide a logical alternative for the more formal syntactic analyses. Beynon-Davies (2009:100) uses pragmatic concepts to sketch a holistic picture of the context of information systems, forming a bridge as informative acts between ICT systems (formative acts) and activity systems (performative acts).

- **History and IS**

Since IS is a young discipline, it is not surprising that relatively few attempts have been made to record the history of the discipline. In order to learn lessons from the past and to avoid reinventing the wheel, such histories are important. In an editorial invitation for IS research on the discipline's historical roots, Roode (2008:1-2) states that we should first know where we have come from before we could move on. This includes reflections on paradigm wars fought within IS as well as other deep issues that transcend mere chronological renderings. An example of this type of historical study, done by Chiasson et al. (2008: 37), is a survey and classification of action research articles in leading IS journals. Galliers and Whitley (2007:26) conducted a similar type of historical study on European IS research, the results of which suggest that the particular characteristic of this body of work is that it uses social theories more often than in the US. A proper history of the use of a specific theory may help to avoid the phenomenon of taking things for granted and a shallow understanding and incorrect use of the theoretical constructs (Shoib and Nandhakumar, 2009). Klein and Hirschheim (2008:297-299) also plead for "a shared sense of history and collective accomplishments" to create a sense of belonging and also as a way of orientation and seeing the bigger picture.

A historical project that would be very relevant in the School of IT at NWU (VTC) would be to investigate the contribution made by Operational Research during the history and development of IS, because both disciplines are housed in the School. According to Klein and Hirschheim (2008:288), Operations Research, like other disciplines, tried to influence the development of IS by enforcing its approaches on the new discipline. Galliers and Whitley (2007:20) also refer to Operational Research as one of the cognate fields that provided momentum to the growth of the IS discipline.

- **Art and IS**

In a sub-discipline like Human-Computer Interaction, principles from the arts have been used for many years to make systems more user-friendly. Whether enough recognition has been given to this fact is an open question. Gregor (2006:634) suggests that "other disciplines with different traditions", such as Art and Design, should be studied as relevant contributors to the foundations of IS. In website development, for example, artistic inputs are necessary to maximize the visual impact to establish the sender's message and draw attention to essential items. Kock (2009:414) argues that e-commerce sites should build on "human universals" in designing their personalized interfaces for diverse audiences. These human universals should not be limited to social sciences, but should also include inputs from the arts and other humanities.

- **Philosophy and IS**

Much research has been done on IS philosophy, albeit under the umbrella of the social sciences. Philosophy lies at the centre of the humanities, however; therefore, we should give credit where credit is due. Above, we have already referred to the study of the relationship between postmodernism and IT. It is a typical postmodernist idea to claim that ontology is "not a given but a construct" (Patterson, 1992:278). This prompts the idea that there could be a plurality of ontologies, which has indeed been explored and implemented in Computing. Therefore, the study of IS ontologies, i.e. taxonomies enhanced by description logics, is one field where philosophical insights come very near to the centre of IS research and practices. The nature of this relation needs to be explored profoundly. Mavetera (2007) and Sewchurran (2008)

used the philosophical concept of ontologies to suggest ways to improve IS software development and project management. Other philosophical points of departure, such as feminism, have been and should be used to enrich our research approaches and enlighten our understanding of "the historical, social and political perspective of IS" (cf. Richardson, 2009:35). We also need well-trained philosophers to explore the validity of the differentiation between positivist and interpretive approaches in IS. According to Weber (2004), this schism reflects a "naïve, archaic view of positivism", a personal conviction which could have serious implications for IS research where the dichotomy is used often (see, for example, Orlikowski and Baroudi, 2002:59, 64; Oates, 2006:281, 291).

7. The Way Forward

I trust that I have given some recognition to the humanities-informed work already being done by highlighting some of the research endeavours discussed in available literature. I have also suggested some new areas of research and teaching that could be addressed in future work. When new theoretical gaps in the field of IS are identified (cf. Kock, 2009:A11), which may be filled by approaches in the humanities, researchers should integrate these concepts into existing IS theories and test and refine the combined models. Attempts that are not successful should be removed, but we should realize that we could only learn by trial and error (Wastell and McMaster, 2008:67).

Of course, this brief overview is not sufficient to appreciate the mountain of work that has gone into this toil. A proper historical work needs to be done in order to attain this goal, and one could only hope that a doctoral student or postdoctoral associate would like to take on this challenge in the near future. Ideally, such a student will already have both the necessary backgrounds of training in IS and historiography.

Another way in which we as IS academics could pay tribute to this type of work is by bundling together these efforts as a research focus, maybe initially as a subfield of Humanities Computing, but which could later become a more independent discipline. The least we could do is to be open and accommodating to research projects that address these matters. Klein and Hirschheim (2008:283) regard the IS field as a

"federated set of multiple communities". Such a community of practice and knowledge with a main focus on the humanities discipline already exists in the humanities (Humanities Computing and the Humanist discussion group), and one can only hope that a parallel community will grow within IS with its main focus on IS issues because this could provide impetus and direction for humanities-informed research. "Paradigmatic identities are formed around differing constellations of beliefs concerning the nature of reality (e.g. ontology), what constitutes valid knowledge (epistemology), including principles and values that should guide proper academic inquiry (research methods and ethics)" (Klein and Hirschheim, 2008:288). While I agree with McCarty (2002) that Humanities Computing should be driven by and accommodated in humanities faculties, I believe that Humanities-enriched IS should be motivated, directed and housed by schools of ICT.

At the Vaal Triangle Campus of the North-West University, we would like to create a home, inter alia, for this type of studies. Therefore we have applied for the creation of a new research niche area, Enterprise Knowledge and Systems (EKaS), which encompasses not only a wide range of topics such as Operational Research, Data and Text Warehousing and Mining, and Enterprise Architecture, but also Humanities Computing and humanities-enriched studies such as IS Ontologies. We trust that EKaS will not only be an administrative unit, but also an "active and welcoming research community" where young scholars will be mentored in order to build a next IS research generation (Vanhoutte, 2003). The creation of a research chair should give momentum to existing projects and stimulate new ones. A second research chair will ensure a balance in the range of research topics to be covered by the School of Information Technology. We are also in the process of appointing post-doctoral research fellows and trust that the work of these promising young and visiting academics will amplify our own efforts. We have started to build a collection of the School's research outputs, making use of Boloka, NWU's institutional repository. In cooperation with colleagues from other campuses and institutions, we have also submitted panel proposals for the ECIS conference in 2010 to discuss the theme of the research niche as well as Humanities-enriched IS since we admit the necessity to determine if and how our ideas resonate in the wider IS community.

The appointment of three extraordinary professors, Professors Aurona Gerber, Paula Kotze and Alta van der Merwe will also boost our studies and teaching in topics such as IS ontologies and Enterprise Architecture. They have already helped us a lot by formulating the title for our suggested research niche area. The School of IT has also started to reach out to colleagues in the information systems industry because we also believe that their experience, tacit knowledge and wisdom are needed to complement the academics' theoretical and philosophical insights (Klein and Hirschheim, 2008:294). In addition, we also have an agreement with the Midrand Graduate Institute to provide a postgraduate home for their IT students. We are also strengthening ties with their staff and trust that we could cooperate in research projects in the future.

I believe that it is important to attract scholars and students who are well informed about theories of the humanities that they adopt for IS (cf. Currie, 2009:73). Under the initiative and leadership of its director, Prof Philip Pretorius, the School of IT is indeed thinking about ways to combine our IT modules with language modules to form a new undergraduate programme in language technology on the campus. We could also expand this idea by looking for more and alternative combinations with disciplines of the humanities. In this way, we could attract more students and eventually avoid "scant attention" to the conceptualisations that we borrow.

We would also like to thank the director of IBIMA for accepting a proposal to create two new open access academic journals in which we will be involved, namely the *Journal of Information Systems Knowledge and Ontologies (JISKO)*, and another that is even related closer to this topic, the *Journal of Humanities and Information Systems (JHIS)*. Since there still are limited publication opportunities for Information System scientists (cf. Straub, 2009:v) in comparison with some other older, well-established disciplines, these new opportunities should be embraced and used. Therefore, our colleagues are invited to submit some of their research outputs to these new outlets. Although it will take some time to get the new journals on the accreditation lists, I believe that all of us also have a responsibility to nurture newcomers in order to build our discipline. As editors and reviewers, we should be like diamond miners taking a positive view while looking for "exciting forays into new research domains" (Straub, 2009:vii). We trust that the general aim in the review

processes of these new journals will be to be inclusive and developmental rather than to perform "a modern hygiene ritual", because we agree with Wastell and MacMaster (2008:64) that "a high rejection rate implies a collective failure of scholarship not the intellectual prosperity of a field [sic]". The creation of publication opportunities for research with refreshing angles, some borrowed from other sciences, is a conscious effort to share interest and useful research and to counteract rigid procedures that are "stifling the intellectual advancement of our discipline" (Shoib and Nandhakumar, 2009).

I trust that we could make a significant contribution to Information Systems if we could act on these and other suggestions to purposefully investigate and explore new avenues opening up for the enrichment of our discipline. According to Grover, Straub and Galluch (2009:iv), IS is "a truly eclectic discipline"; therefore, we should not shy away from incorporating insights of the humanities that may help us to deepen the understanding of IS research problems.

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