CREATING A BRAZILIAN SCHOOL IN INTERNATIONAL INFORMATION SYSTEMS RESEARCH: OPPORTUNITIES AND CHALLENGES

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With the so-called "emerging markets" increasingly present on the front pages of newspapers around the world, more and more people are turning a curious eye to these countries, trying to better grasp their economy, culture and political systems. The creation of the term "emerging markets", which dates back to 1981, serves to validate the interest of industrialized countries, since "emerging" suggests progress, uplift and dynamism, whereas the term "third world" carries negative, "laid back" overtones, suggesting stagnation and recalls the still recent colonialist history of these countries.

It is strange that in 2011, countries like China and Brazil are still referred to as "emerging" even though they already are the world's second and eighth largest economies, respectively. Ten years ago, Jim O'Neill, chief economist of Goldman Sachs, came up with the acronym "BRIC" – Brazil, Russia, India and China – to identify the next four countries expected to enter the economic big league, arguing that they should not really be thought of as "emerging markets" in the classical sense but as a critical part of the modern globalised economy.

In brief and for a number of reasons, countries like Brazil, China and India are increasingly the focus of worldwide attention. From an academic perspective, this gives rise to interesting opportunities for researchers living in these countries: they can finally set out their own views and perspectives on their past and contemporary contexts, thus reversing the long tradition of having their history told in terms of an external logic (mostly from the US and Europe).

Areas where Brazil is showing innovative transformations include the utilization of information and communication technologies (ICT). Applications like electronic voting and income tax declarations via the Internet have attracted international attention since the 1990s either because of its level of efficiency, in the case of the former, or because of the millions of people handled, in the case of the latter. Brazilian banking technology has also proved to be innovative in its use of ICT domestically.

In 2010 Brazil entered the group of countries with more than one cell phone subscription per inhabitant and Internet access by the low-income population has grown in a very interesting way: despite government investment in free access telecenters, it is the "LAN house" phenomenon, small facilities that provide internet access at affordable rates, that is responsible for pushing up Brazil's connectivity level. A report from the Brazilian Internet Steering Committee reveals that, among the poorest, more than 70% access the Internet through one of the more than 90,000 "LAN houses"

spread across the country, compared with only 5% that have Internet access at government telecenters (BARBOSA, 2010).

These figures suggest that information and knowledge is being shared and micro-businesses are being created (mostly informally) through the innovative appropriation of technology by low-income populations. The "LAN house" phenomenon is creating new forms of social and economic interaction, and new emerging and open business models, whose impacts and consequences are still largely unknown.

Another example of Brazilian innovation through ICT is the correspondent banking model that is responsible for giving the low income population access to financial services all over the country. A report from Febraban, the Brazilian Banks Federation, indicates that the 150,000 correspondent points in the country account for 6% of all banking transactions. Correspondent banking is also the bank channel that is growing fastest, serving mostly the poorest and the most remotely located population (CIAB, 2010). The correspondent network guarantees that banking services are available in all of the country's municipalities, delivering 80% of all Federal Government social benefits to more than 40 million Brazilians, most of whom have little or no access to financial services (FELTRIN et al., 2009). Besides these beneficiaries, correspondents also benefit local economies by improving the quality of life in the localities where they operate, which are often remote from developed centers.

The "LAN house" and correspondent banking cases exemplify how the use of ICT in Brazil over the last decade has opened up opportunities for creating original research in the country's IS field. However, some challenges still remain for Brazilian researchers wishing to develop a recognized worldwide research tradition as the country grows in importance on the global scene.

OPPORTUNITIES

Brazilian researchers have a window of opportunity for establishing what could be termed a Brazilian school of IS research. In this vein, attention should be given to one of the most widely acclaimed features of Brazilian culture, one that is intertwined with its history: "*metissage*", i.e., the mixing of races, cultures and various ethnic sources that underlies the formation of the Brazilian people. In his influential book "*O povo brasileiro*" (The Brazilian people), Darcy Ribeiro (1995) explains that such a mix started with the arrival of the Portuguese invaders of

Brazilian territory, which was populated at that time (1500 AD) by more than 3,000 different Indian tribes:

> We [Brazilians] came from the confluence, the cultural shock, the mingling of the Portuguese invader with native Indians and African slaves. We are a syncretic culture, a new people who, despite being the offspring of the fusion of different matrices, behave as if we sprang from a common one, not holding on to the past. We are open to the future. [free translation]

In addition to Portuguese, Indians and Africans, successive waves of immigrants, mainly Italians, Germans, Spanish, Japanese, Lebanese and from more than 30 other origins, have been progressively integrated into Brazilian culture since 1820. A tour of the 8 million square kilometers of this vast country brings one face-to-face with a staggering range of people, with their rich diversity in terms of cooking, flavors, dance, music, myths, religions, values – yet all speaking the same language and all feeling themselves to be Brazilian. This integration does not mean that social and racial conflicts do not exist in Brazil. Racial prejudice and inequalities still exist, particularly with regard to those of African descent and native Indian tribes. Yet, this mix gives Brazilians a unique identity, of which diversity is a major component. As expressed by Darcy Ribeiro (1995), Brazilians are a new people emerging as a national ethnicity that is culturally distinct from its formative sources, intensely miscegenated and driven by a syncretic culture that is distinguished by the redefinition of the cultural traits emanating from its original sources.

This Brazilian flair for mixing, remixing, assimilating and appropriating, was notably celebrated in the 1922 Week of Modern Art held in Sao Paulo in conjunction with the Anthropophagic Movement. In the Cannibal Manifesto *(Manifesto Antropófago),* Oswald de Andrade wrote that the goal of the movement was to express the idea that Brazilian culture is the result of a mix of the cultures of others: an "other" that is external, i.e., North American and European, and an "other" that is internal, i.e., native Brazilian Indians and their descendants, Afrodescendants and Euro-descendants. Brazilians should neither deny foreign cultures nor imitate them.

> We will take in and swallow up all the different influences. Our bodies will absorb what delights us and best suits our needs. Rather than denying the impact of other cultures, we claim them and paint them green and yellow 'abrasileirando-as' (we 'Brazilianize' them) [free translation]

The idea of a culture of mixing and a citizen's anthropophagic creativity has been recently reinvented by the emerging creative commons movement (creativecommons.org). Formally initiated in Canada and the US, in Brazil creative commons has found one of its biggest exponents. Proposing a new way of dealing with intellectual property, particularly with regard to digital culture (all cultural artifacts that can be digitalized, like music, photos, videos, images, drawings, paintings, texts), creative commons represents the freedom of the collectivity, which benefits from knowledge and art, creation and recreation. The work of the Technology and Society Center (direitorio.fgv.br/cts), led by professor Ronaldo Lemos, is an exemplary illustration of the possibilities for our society, coming from the exploration of the sharing, remix, reuse (legally), reinvention, creative commons and open business models emerging from the peripheries, all of which is enfolded in "Brazilianity" (*Brasilidade*). Themes like creative commons, social commons, digital inclusion, digital culture, social technology (DAGNINO, 2009) and ICT-enabled social networks represent just a small portion of the domains that could be investigated by Brazilian IS researchers, who have the opportunity to offer new insights into emerging phenomena.

CHALLENGES

In addition to the opportunities previously discussed, a number of challenges are involved in the process of internationalizing a new and original Brazilian stream of research, particularly in the IS field. We outline three of them here.

First, we point to evidence that research related to ICT in Latin America is not being published internationally by Latin American researchers. Even if Brazilian researchers appear as co-authors in some publications, the researchers, research groups and leading international publications that focus on Latin America are affiliated with North American or European institutions. Yet, a look at Brazilian management journals publishing IS research shows there is a rich, dynamic, and thriving academic production. Discussion with Brazilian researchers working in Brazilian institutions reveals a number of reasons why they are not publishing internationally. Language remains a formidable barrier. Writing articles in good English is not all that easy for researchers living in a country where the only spoken language is Portuguese and that, despite its continental dimensions, is quite isolated geographically from the US and Europe.

Brazilian researchers do not have frequent occasion to practice English in their country.

Another factor that is not conducive to the internationalization of Brazilian IS research is that Brazilian researchers are rarely active in leading academic networks or on the editorial boards of international journals, particularly the most prestigious ones. It is a well known fact that participation on editorial boards or collaboration with leading researchers plays a key role in the publishing process. Researchers living in the so-called "emerging countries" are often not well-positioned vis-à-vis this criterion.

A third challenge for the creation of an international Brazilian IS research stream can be summarized as follow: an absence of theory (or a clear stance regarding the theoretical domain) in Brazilian academic articles. By absence of theory we mean that Brazilian researchers recurrently send papers to be evaluated for presentation at national conferences or for publication in national media and when these papers are screened they are seen not to have any clearly identifiable position with regard to their theoretical dimension. It seems that the substantive aspect (the subject under study) is perceived as more important than the theoretical aspect (the perspective adopted in examining the subject being studied). Efforts to increase theoretical and methodological robustness are already in place, as ENANPAD and the top Brazilian journals show, and these efforts should be strengthened in order to allow for the emergence of an internationally respected Brazilian school of IS research.

Discussing theoretical relevance means recognizing different theoretical perspectives. Different views exist on what original and relevant theory might entail; typologies, taxonomies, classifications, metaphors, images, representations, the disruption of taken-for-granted premises? "A theorist is considered great, not because his theories are true, but because they are interesting", claims Astley (1990) - but interesting to whom? Debates about the role of theory in research are dependent on particular research traditions. By research tradition we understand a complex ensemble of assumptions, worldviews, orientations, procedures and practices (PRASAD, 2005). Put simply, it involves an entire way of conducting research, commonly aggregated behind labels like positivist, functionalist, constructivist, interpretive, critical, post-modern, etc.

Two debates published in management and IS vehicles illustrate the kind of tension that exists between conflicting visions of what theory is and the ontological standpoint from which those visions emerge. The first is the debate, published in 1989 and 1991 (AMR) on theorizing from multiple case studies. Whereas Eisenhardt proposes a

vision, based on a positivistic standpoint, Dyer & Wilkins develop a strong critique, based on a more interpretive standpoint: better narratives or better constructs. The second is the debate published in 1999 (MISQ) on the relevance of IS research: relevant to whom? Benbasat & Zmud and Lyytinen offer conflicting perspectives on relevance and rigor in research from positivistic and critical perspectives. Those published debates are clear illustrations that the research tradition one espouses strongly influences one's vision of what type of research is interesting and valuable in one's eyes, and why (POZZEBON, 2004).

In seeking to propose some provisional avenues for theoretical advances, Brazilian researchers, espousing a more positivistic stance, could rely on Gregor (2006) to position their theoretical contribution. In her article "The Nature of Theory in Information Systems", Gregor offers five types of theories that might help IS researchers argue for the nature of their theoretical contribution: (a) theory for analyzing (this type is interesting for positioning research whose final products are typologies and taxonomies, for instance); (b) theory for explaining; (c) theory for predicting; (d) theory for explaining and predicting; and (e) theory for design and action (more prescriptive results). We believe that a huge number of Brazilian researchers could better position their research contribution by mobilizing types (a) and (e), for instance. It is important to note that Gregor's theoretical vision is strongly influenced by the classic work of Bacharach (1989), where he presents criteria for organizational theory evaluation. Bacharach defines theory as a statement of relations between units observed or approximated in the empirical world. Approximated units are constructs which, by their very nature, cannot be observed directly (e.g., IS strategy, centralization, core competencies). Observed units are variables, made operational empirically by measurement (Figure 1). Therefore, the desired path of theory building starts by conceptualizing constructs to eventually develop variables that can become operational and, thus, test the theories.

Brazilian researchers having a non-positivistic position could draw on Walsham (1995) for positioning their theoretical contribution. In his article about interpretive research in IS, Walsham offers a different way of arguing about the nature of our theoretical contribution. In an interpretive work, we could claim that our contribution takes the form of (a) the development of concepts; (b) the drawing of specific implications; (c) the elaboration of rich insights, or, hopefully; (d) the generation of theory. In these cases, theorizing refers to the act of making sense of a social interaction, rather than testing the necessary and sufficient relationship among variables. From an interpretive or constructivist standpoint, theory is seen as a sensitizing device.

Likewise, Klein and Myers (2001) propose a classification scheme of interpretive literature to help IS researchers identify the type of contribution they are making, organized into two broad groups: contributions to the foundations of interpretive research and contributions to the applications of interpretive research. Even though they are interesting, these three aspects are mentioned here provisionally. As previously stated, we believe that in the near future Brazilian researchers will create (recreate,

Figure 1 – **What theory is, for Bacharach (1989)**
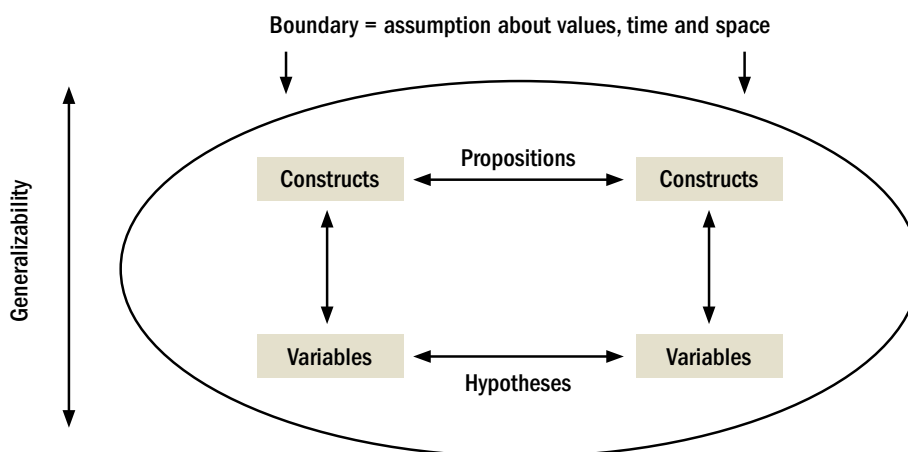
mix, remix, assimilate, appropriate) their own formulation of what theoretical contribution means.

THIS SPECIAL ISSUE

To stimulate debate on the development of a particular look at the original use of ICT in emerging countries, *RAE–revista de administração de empresas* – launched a call for papers directed at researchers interested in submitting their contributions relating to investigations into the use of ICT in Brazil and Latin America. Guest editors of this call for papers asked for contributions to be submitted in English to facilitate the dissemination of the published articles to a broader audience and also invited authors to send papers mainly related (but not limited) to the social use, implications and impacts of ICT in Latin America.

The result of this call for papers is presented in this special issue with 6 peer-reviewed articles and one invited article, thus counting on a select group of authors who are in some way representative of those Brazilian researchers concerned with investigating the ICT scene. Review of the 6 peer-reviewed articles took 194 days, on average, and all articles were published in their third version, after modifications provided by authors based on comments made by the 12 reviewers (from 12 different institutions) and 3 guest editors. The invited article is published as an essay in the 'pensata' section in Portuguese; its English version will be available on the *RAE* web site.

Papers published in this issue were also presented at the II RAE Workshop held at Fundação Getulio Vargas in São Paulo on November 5th 2010, when an audience of more than 30 IS researchers, professors and students from 12 institutions, from six different Brazilian states were able to debate the research work directly with the authors. Guest editors presented their own views on the emerging way of thinking in IS and the relevance of IS researchers production to practitioners; this was followed by a lively discussion with the whole audience. The workshop was also transmitted online and an edited video version will be available on the *RAE* web site.

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