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Published in:
Aslib Proceedings

DOI:
10.1108/00012530710817636

2007

This article is an author manuscript. It was published as:

Haider, J. (2007), "Of the rich and the poor and *other curious minds:* on open access and development", ASLIB Proceedings, Vol. 59 No.4/5, pp.449-461. pp.371-385. Available at: http://www.emeraldinsight.com/10.1108/00012530710817636

For citation, please refer to the published version.

Of the rich and the poor and *other curious minds*: on open access and "development"[1]

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Abstract

Purpose - To reconsider open access and its relation to issues of "development" by highlighting the ties the open access movement has with the hegemonic discourse of development and to question some of the assumptions about science and scientific communication upon which the open access debates are based. To bring out the conflict arising from the convergence of the hegemonic discourses of science and development with the contemporary discourse of openness.

Design/methodology/approach - Critical reading of a range of published work on open access and the so-called "developing world" as well as of various open access declarations. The argument is supported by insights from post-development studies.

Findings - Open access is presented as an issue of moral concern beyond the narrow scope of scholarly communication. Claims are made based on hegemonic discourses that are positioned as *a priori* and universal. The construction of open access as an issue of unquestionable moral necessity also impedes the problematisation of its own heritage.

Value - This paper is intended to open up the view for open access's less

obvious alliances and conflicting discursive ties and thus to initiate a *politisation*, which is necessary in order to further the debate in a more fruitful way.

Keywords open access, development, developing countries, scholarly communication, discourse

Paper type Conceptual paper

Introduction

> An old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds (BOAI, 2001).

These sentences open the "Budapest Open Access Initiative" (BOAI) which with "open access" (OA) gave in 2001 a name to a new phenomenon in scientific publishing and scholarly communication that had emerged in the preceding decade. As in other forms of publishing, scholarly publishing has also been affected by the increased significance of digital media, and in particular by the Internet. Especially during the latter half of the 20th century the number of journals published had increased significantly and scientific publishing, or more precisely the distribution of journals, had undergone considerable changes. While earlier they had been sold primarily to individuals, during the course of the 20th century they were subscribed to increasingly only by institutions (Tenopir and King, 2000). Concurrently scientific publishing had been subject to large-scale mergers of publishing houses and price increases far beyond inflation, which has stretched the acquisition budgets of libraries and led to cancellations of subscriptions; a situation which has been described by the name "serials crisis".

The most visible and most debated new model that emerged from the changed circumstances in this context is OA. Superficially, OA takes advantage of two factors. Firstly, scholarly authors do not derive any direct income from publishing, yet they have an interest in the high visibility of their publications. This is less for the "*sake of inquiry and knowledge*" as the BOAI, quoted above, would have it and has more, or everything, to do with the symbolic capital that publications accrue. Secondly, in comparison to print, the Internet has the potential to make the distribution of documents relatively inexpensive. Numerous definitions of what constitutes OA and how to achieve it exist. Despite some differences, all refer to a mode of enabling

perpetual, free, online access to scholarly literature, either by publishing in OA journals or through the archiving of material published elsewhere in OA repositories or on the authors' own websites. Some are more restrictive and refer solely to the peer-reviewed literature, while others take a broader view and also include pre-prints and other un-refereed material, as well as, for example, teaching materials or data sets.

As argued below, the primary relevance of OA might not lie with what is considered the centre of the system of science and its actors. In its core OA is about extending access to scientific information and, ultimately, it is about science, or what could and should be called modern or Western science: a particular and peculiar form of knowledge whose status depends on its claim to be universal and which is arguably one of the most powerful forms of knowledge to have shaped the world. Despite the fact that occasionally OA is also extended to include other materials, its root concerns lie with one of the most central institutions of science, the scientific journal and with it the peer-reviewed article. These have come to depict an idealised version of scientific progress, perceived as a relatively straightforward cumulative venture, where each research project and each article is based on the preceding ones and where citations serve to give due credit. In a certain way, the scientific article, peer-reviewed, collected and distributed in journals, and connected to the preceding and surrounding ones via citations, has come to determine how modern science itself is imagined. Despite the emergence of Post-Kuhnian science studies and strong voices of criticism, in particular from feminist quarters (e.g., Harding, 1991, 2006), perceptions of linear progress and the simple cumulative nature of science still contribute significantly to the terminology in which many current debates – especially in LIS and Librarianship - are couched. Also, the OA debates seem to draw to a considerable degree on this idea of science and are largely rooted in an understanding of science and scientific communication that adheres to this depiction.

Yet at the same time, as the opening sentences of the BOAI quoted at the outset, illustrate, OA has always also been portrayed as more than simply a means to speed up and ease the process of scholarly communication. More importantly, it is also negotiated in terms of extending the accessibility of this type of information, or better documents, to otherwise excluded populations or, in the words of the BOAI, to "*other curious minds*". In particular, if it is true that science's formal literature is hardly used at the research front and most published articles are never read (see Frohmann, 2004,

p. 4), or at least they are never cited, then facilitating and widening access to these literatures within and for the scientific community cannot be the central significance of OA. Furthermore, by definition, being part of a discipline means having access to what is considered a field's core literature, even if it is the *paradox of sciences formal literature*, as Frohmann (2004, p. 91) maintains:

> [It] conveys very little, if anything, of substance contributing to the performance of research science, perhaps only communicating a subtext about science's social systems of intellectual priority and status hierarchies.

> [T]he degree of use of information services, apparatuses and procedures turns out to be a function of how little rather than how much knowledge users possess.

It appears that the most interesting aspects of OA lie less with the scientific community at what is considered the centre of science, but with its margins and fringes (i.e., with types of documents that do not form part of the official and formal literature and in particular with groups that are typically beyond the reach of these literatures). Two groups, who are continuously referred to, seem especially significant in this regard: on the one hand, the so-called "public", and on the other, those researchers and institutions, who for financial reasons, cannot afford to purchase (access to) scholarly journals. Here, the most important groups are scholars and institutions in what is usually called the "developing world" [2].

Open access for the "developing world"

Significantly the coinage of the term OA itself in 2001 took place in the context of a development project in the widest sense of the word. The BOAI was initiated and funded by the Soros Foundation's "Open Society Institute", a charitable foundation set up by billionaire philanthropist George Soros, which has as its prime areas of action and intervention a number of "developing countries". Since then the Soros Foundation has developed into one of the main funding bodies behind OA and it has financed countless workshops and conferences and sponsored such highly visible projects as, for instance, the "Directory of Open Access Journals", the "Open Access Newsletter", and also the EiFL "big deal" library consortia arrangements, which also include OA products. It is intriguing in this context that the Soros Foundation's "Open

Society Institute" is specifically dedicated to the promotion of a liberal-democratic, Popperian so-called "open society". By this they mean a "society based on the recognition that nobody has a monopoly on the truth" (OSI). While Popper not necessarily privileged European forms of societal organization (Notturno, 2000), this is still interesting, since at the same time Popper's name cannot be separated from what he is best known for, his philosophy of science, which privileges the rationality of the scientific method and his theory of falsification. This modernist view of science and of science's universality is based on the very claim that it has the monopoly to truth, or at least that science constitutes a prior and universal form of knowledge. It has come under considerable attack with regard to its role in the process of colonialism and later of development and it has been associated with the destruction of other knowledge systems, in particular those that have been relegated to a status of *indigenous* knowledge (e.g., Nandy, 1988, 1992; Marglin, 1996; Harding, 2006). At the very least it seems intriguing that one of the prime organisations behind the OA movement is located in the wider area of development initiatives, and secondly that it had been set up in the very name of one of the most prominent modernist philosophers of science.

In the vicinity of librarianship OA emerged as a topic strongly associated with the "serials crisis". The "serials crisis" has impacted the budgets of libraries in general, but it is said to have particularly affected libraries in economically weaker countries, especially in Africa (Willemse, 2002; Muthayan, 2004), which during the same time have also undergone economical crises.

A number of continuously re-emerging issues tie a supposed need for open or free access to scholarly publications to the "developing world".

Open access is seen as constituting a way to better connect the "developing world" to the system of science, by potentially providing access to scientific literatures published in the "developed world" (e.g., Chan and Costa, 2005; Chan *et al.,* 2005; Chan and Kirsop, 2001; Arunachalam, 2003; Ramachandran and Scaria, 2004; Deschamps, 2003; Scaria, 2003; Weitzman and Arunachalam, 2003; Tenopir, 2000; Smart, 2004; Durrant, 2004). Occasionally, while broadly favouring access to more literature from the "developed countries", this is also associated with threats to the local journal production, which could suffer from an increased availability of this

usually more prestigious material (e.g., Durrant, 2004; Smart, 2004; Scaria, 2003). Habitually reference is made to three different types of divides or gaps, namely a North/South, a South/North, and a South/South divide. Each divide is related to a direction of "information flow", which OA is perceived as having the potential to enable or to intensify (e.g., Deschamps, 2003; Durrant, 2004; Smart, 2004; Chan and Costa, 2005; Chan *et al.*, 2005).

A further connection between OA and the "developing world" is made via the so-called "big deal". To stay within their budgets, libraries began to negotiate the provision of whole sets of journals at a fixed price with big publishing houses. On the one hand this allowed them access to more journals, but on the other hand it restricted choice. At times it also forced libraries to restructure their budgets in ways that required cancelling subscriptions to journals published by smaller publishers or by scholarly societies. For the "developing world" the big deal is said to have had effects that go beyond merely restricting the availability of material (Chan and Costa, 2005; Chan *et al.*, 2005). Since journals from the "developing world" are usually published by small publishers (Rosenberg, 2002), the logical conclusion seems to be that if these journals were OA they would still be used by readers in libraries, which had cancelled their subscriptions, or which had never subscribed to them (Chan and Costa, 2005). Of course, this also applies to journals that are independent of the serials crisis, are excluded from collections and bibliographic databases, and which show considerable bias against publications from "developing countries" (Sancho, 1992; Narvaez-Berthelomet and Russel, 2001). More generally, OA is perceived as potentially extending the readership and reach of scientific publications from the "developing world" and thus as increasing its visibility and impact (e.g., Arunachalam, 2003; Ramachandran and Scaria, 2004; Davison *et al*., 2005; Deschamps, 2003; Scaria, 2003; Weitzman and Arunachalam, 2003; Tenopir, 2000; Smart, 2004; Durrant, 2004; Rajashekar, 2004).

In short, OA is thought to benefit "developing countries" by increasing "information flows" and by "connecting" them to the "system of science", which, since it is persistently portrayed as synonymous with progress, is depicted as the necessary prerequisite for any form of "development" to take place.

Famously, the move to provide free online access to a considerable number of its

scientific journals was undertaken at a nationally and internationally orchestrated level by Brazil in the form of "SciELO" (Scientific Electronic Library Online). It was set up – avant la lettre – in 1998 and has since been expanded across the whole of South and Latin America. It now also includes Spain and Portugal. It is based on a very stringent policy and a strict system of control, which measures quality largely by reference to the mainstream international bibliographic databases. Although SciELO includes literatures spanning from psychology via linguistics and the arts to engineering, by far most of its journals are in medicine and related areas. Its main funding bodies are large organisations active in health politics and its methodology was originally developed in cooperation with BIREME (Latin America and Caribbean Centre on Health Sciences Information), PAHO (Pan American Health Organization), and the WHO (World Health Organization) (Marcondes, Sayão, 2003). All three are major players in national, regional and global health politics.

This is illustrative of two aspects of OA that are particularly relevant when seen in relation to the "developing world". Firstly, it brings to the fore that it is an issue which is also very much the concern of major international organisations. Secondly, it also highlights the link between the "developing world" and OA related to the field of medicine and health and to the politics surrounding it. This is characteristic of many of the debates on the "developing world" and also present in the various OA debates. Furthermore, the biggest free-access initiative, HINARI (Health Internetwork Access to Research Initiative), equally funded by the WHO, through which major commercial science publishers grant institutions in a number of "developing countries" free online access to scientific journals, is equally situated in the area of health and medicine. Although not considered to be OA in the actual sense of the word - which requires unrestricted free access for everyone, while here it is granted only to certain groups, dependent on a country's GDP - the discussions surrounding it as well as the language, in which its usefulness is debated are in relevant parts very similar to those that are connected to OA *proper*.

While it could, of course, be argued that this might be merely reflective of the fact that medical research plays a significant role for scientific publishing and also for OA in general – for instance, BioMed Central, the biggest commercial OA publisher is situated in this field – the potential of OA for medicine and health care in the "developing world" is still often emphasised separately (e.g., Weitzman and

Arunachalam, 2003; Smart, 2004; Chan and Costa, 2005; Chan *et al.*, 2005). Furthermore, despite voices of criticism, not only are notions of the "developing world" still primarily entangled with images of suffering and disease (Nandy and Visvanathan, 1990; Escobar, 1995), also, as Nandy and Visvanathan (p. 145) maintain, "the language of modern medicine has contributed handsomely to the language of development". Correspondingly, not only are many of the OA or other free access initiatives devoted to "developing countries" concentrated on medical research and health issues, which of course are relevant and legitimate concerns, but more importantly, the debates preceding and surrounding them, however subtly, still draw on this vocabulary and almost invariably enforce the perception of the *poor*, *diseased* and *weak* peoples of a global "South". This happens not least by introducing the notion of an "information famine" (Chan *et al.*, 2005), thus evoking the misery of starvation and with it one of the strongest and some say most violent images (Escobar, 1995, p. 103) that have shaped relations with the "developing world"; or by referring to the "peoples of developing nations" alongside the "disabled", as is done in the "IFLA Statement on Open Access" (IFLA, 2004).

"Open access" as a movement

Since the BOAI convened in 2001 the number of charities, development agencies, and funding bodies that became involved in the *politics* of OA has increased steadily (comp. Bailey, 2005). Concurrently, the number of initiatives, petitions, declarations, and mission statements has increased equally consistently. They are also the documents setting out the definitions of OA, its conditions, requirements as well as its goals. These can be of a very all-encompassing nature. Besides the BOAI, the most relevant are the *Bethesda Statement on Open Access Publishing* (BS, 2003), and the *Berlin Declaration on Open Access to Knowledge in Science and the Humanities* (BD, 2003). The *Salvador Declaration* (SD, 2005) has been formulated specifically with "developing countries" in mind.

The BOAI's envisioned effect of OA is to:

> accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge.

The Bethesda Statement is more specific and aimed at the biomedical research community. Its purpose is to:

> stimulate discussion [...] on how to proceed, as rapidly as possible, to the widely held goal of providing open access to the primary scientific literature.

The *Berlin Declaration* on the other hand has the more general "mission of disseminating knowledge". It sets out "to promote the Internet as a functional instrument for a global scientific knowledge base and human reflection" and defines "open access as a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community". The *Salvador Declaration on Open Access*, which is intended to provide a specific developing world perspective, and according to which "open access promotes equity", contains yet another version of OA. Here it is simply said to "[mean] unrestricted access to and use of scientific information".

By referring to concepts, such as *humanity*, *poverty*, *cultural heritage*, or *equity*, which are all highly charged notions entangled with strong connotations and related to various agendas, these few excerpts draw on very powerful images that tie OA to specific discourses, and whose use in this context has implications. Specifically a certain idea of *poverty* has been fundamental in development discourse for the construction of underdevelopment and consequently the division of the world into developing and developed parts as well as the related relations of dominance (Escobar, 1995; Rist, 2002; Mestrum, 2002). Furthermore, in contemporary ICT and information society debates, with which the OA debates overlap, a techno-centric and economistic notion of *poverty* contributes nicely to more recent constructs, such as the "digital divide" or "information poverty". This is not least achieved by drawing on the authority of the hegemonic discourse of development (Wilson, 2003; Haider and Bawden, 2006).

The reference to these concepts also clearly highlights that OA first and foremost has to be regarded as a movement and that it is being tied to issues that position it in the realm of certain types of political engagement. This perception is re-enforced by a closer look at the constantly growing literature on OA, which consists largely of

opinion pieces, studies carried out in the name of specific interest groups, how-to guides, and policy documents (see Bailey, 2005). Myriads of national and international organisations, charities, foundations, various funding and government bodies have outlined policies, signed declarations, advanced mission statement or else got involved in the wider politics of scientific information, that can be said to have one current focal point in OA. This reaches, for instance, from the already introduced Soros Foundation to the Wellcome Trust in the UK, the National Institute of Health in the USA, or the Chinese Academy of Sciences as well as the OECD. For instance, the 2004 UK House of Commons Science and Technology Committee report on scientific publishing contains extensive references to the "developing world" throughout (UK STC, 2004).

The aims pronounced in the numerous OA petitions and mission statements and in the various reports and policy papers draw on discourses attempting to tie the need for OA to a number of factors that construct it as an issue of moral and political concern, quite beyond the seemingly narrow scope of scholarly communication. By doing so, the "developing world", its information needs and its fate are constructed in particular and often also in conflicting ways.

For example, in a two-week long email discussion during summer 2006, organised by the Coady International Institute (Coady, 2006) - a Canadian development agency - OA was discussed not only as a panacea for all things development, but quite curiously a great number of postings also ignored its origins within the science system. Rather, OA and its relevance for "development in the Global South" (Coady, 2006), which was the explicit purpose of the discussion, was debated largely in relation to infrastructure problems, general issues of poverty, malnourishment, education, and in its significance for development workers. Having said that, concerns over the representation of the "developing world" did arise in the debate, specifically over its representation in the media. However, well-known images of powerlessness continued to be advanced simultaneously and the friction between positions re-affirming what could be called stereotypical images and those trying to unravel them remained strangely subdued. Likewise, while a certain unease towards a lot of development *practice* could be sensed throughout, the ultimate belief in the possibility of development remained unshattered, as did ultimately the belief in technology as the facilitator of such evolutionary progress.

Science and development

To some extent the representation of OA, specifically so in relation to development, is based on assuming a causal connection first between science and its (formal) literature as well as "information systems" and subsequently with the possibility of development and it is dependent on at least two factors. Both are dependent on assumptions that are problematic for various reasons and which usually ignore the instrumental relationship science had with colonialism and furthermore neglect the connection between colonialism and development.

Firstly, it depends on a view of science as a neutral, privileged, and crucially as a universal form of knowledge. Secondly, it is based on an evolutionary perception of development as the fundamentally positive, continuous advancement along known pathways, towards a state of development that had already been reached previously by another society. Both are also bound to ideas about science and technology, which uncritically equate scientific and technological advances with positive, societal progressiveness. Of course, this is not a new phenomenon, but as Arturo Escobar (1995, p. 36) reminds us, "[s]cience and technology had been the markers of civilization par excellence since the 19th century".

The ideas of science and of societal change that arrive from the direct association of science with knowledge and considerably build on the assumption of science's universality have been criticised, questioned, and challenged on a number of accounts and this has given way to various forms of post-studies, including post-kuhnian, post-colonial, or post-development (Harding, 2000). Yet at the same time, both can still be said to underlie certain perceptions of science, technology and development that dominate the views of policy makers, large development institutions as well as international organisations. It is still a widely held belief that a causal connection exists between scientific advances and mostly positive social progress and that more science and increased science and technology transfer can only benefit society (Harding, 2006, p.1 et seq.). This becomes especially evident in the context of major international summits, one of the arenas where OA is debated. For example, in the context of the *World Summit on the Information Society* the relevance of scientific information for development, more often than not tied up with technology, was amongst the foremost issues discussed. Whereas, the notions of science as well as of

development were fundamentally used as unproblematic and OA quite easily found its way into the declaration of principles (WSIS, 2003a) as well as the plan of action (WSIS, 2003b).

This has to be seen as situated within a theme that has a long standing tradition. The notion of science and technology for development already appeared in the by now famous point four of US President Harry Truman's inauguration speech in 1949. This particular speech is understood to have heralded the age of development by first introducing the concept of underdevelopment into the language repertoire of the political mainstream after WWII (Esteva, 1992; Escobar, 1995; Rist, 2002). It has developed into a standard theme in the language of development institutions. To this day, whilst constantly being reinvented as presenting a unique opportunity facilitated by technological changes, it appears in documents issued by these and similar organisations in ways that have changed surprisingly little since the 1950s. In certain ways, the role OA is assigned and the manner in which it is depicted also has to be seen as a continuation of these themes and the policies connected. A statement such as, "Scientific and technological research is essential for social and economic development", taken from the "Salvador Declaration on Open Access", clearly marks out this continuation and it affirms OA as tying into forms of representation that adhere to a depiction of the world according to the classic development paradigm which has by and large dominated the post-war era. Likewise, if the BOAI speaks of an "unprecedented public good" made possible through a "new technology", this affirmation of novelty paired with an untarnished view of the possibilities of technology also positions it in the long-standing tradition of *development speak*.

Conflicting discursive ties

The OA movement ties heavily into long-established discourses, while at the same time it draws on and shapes current ideas about openness, the commons, and networking. In this sense OA also provides a focal point for certain aspects of several wider developments that are particularly relevant in contemporary society, which cannot be disconnected from their histories and contingencies. These are the expansion and distribution of science, the changed circumstances of communication on the Internet, status and conceptions of information, as well as the inequalities that define international relations, to a large degree still captured neatly in the highly

charged notion of "development". Despite the fact that some attempt to delineate OA from other "open" movements – for example, open source, free software, or creative commons – (Harnad, 2006), clear connections and convergences between them exist, in particular in the language used, and in the ways in which all, albeit in different ways, are positioned as counter currents to contemporary developments concerning various aspects of intellectual property regimes.

It is thus particularly intriguing to observe how OA links into two, at least seemingly opposing ways of speaking, which are both particularly interesting when considered in regard to those that are marginalised. On the one hand, as has been discussed, OA is largely about what has been called "Western", European, or modern science and ultimately it is about extending its reach through its texts. On the other hand, OA, more than just by virtue of its name, also ties into the contemporary and highly ambiguous discourse of openness, which is represented most prominently by the open source and also the free software movements. This brings it into the argumentative proximity of what is commonly perceived as a counter movement, which positions itself in opposition to mainstream trends. Put differently, OA ties into at least two discursive spaces, which, at least on the surface, seem to be if not fundamentally opposing, at least conflicting. One that is firmly grounded in advancing the very type of knowledge that is associated with modernisation and modernity and which to a degree has been interpreted as a symbol and expression of Western dominance and its quite concrete consequences (e.g., Alvares, 1992); and one that stands for opposition, collaboration, participation, and resistance. The problematique or conflict arising from this convergence, it seems to me, is particularly palpable when notions of the "developing world" are introduced and becomes even more obvious when ideas about indigenous knowledge filter through in the debates and their role in relation to science becomes an issue in need of justification. It is this conflict that makes OA such an interesting phenomenon. Curiously, however, it seems that it is also this very conflict which positions OA firmly within the realm of the various contemporary open and free movements and which all appear to oscillate between providing platforms of resistance or merely supposedly *better* tools for capitalist advancement.

Berry and Moss (2006) point to a general problem with regard to the arguments of *free culture* in general, and the *Free Software Movement* in particular, when they say these:

> [A]re overwhelmingly made within a *moral* register. Claims to authority are made by reference to *a priori* human rights divorced from the political realm. Decisions are made between 'right' and 'wrong' [...] on the basis of a supposedly shared morality.

This is an important statement and it also rings true for OA. Here equally claims are made based on hegemonic discourses that are positioned as *a priori* and universal and this seldom forecloses any serious engagement with the historic and political contingencies of these claims. The construction of OA as an issue of unquestionable moral necessity, while understandable from the perspective of the protagonists involved, also impedes an explicit politicisation and frankly also the problematisation of its own heritage, which is necessary in order to be able to determine where the less-obvious fault lines lie and thus possibly to arrive at some conclusions about OA's alternative potential for change.

Notes

1. Acknowledgements: I am grateful to David Bawden for his valuable comments. I would also like to thank the participants at seminars at Lund University, Sweden, and at the Swedish School of Library and Information Science in Göteborg and Borås for discussing with me some of the ideas presented here, above all Jan Nolin. The author is in receipt of a doctoral award by the AHRC.
2. The terms “developing world” or “developed world” are here not taken to imply certain individual countries, categorised as such according to one of the various classifications. One way to envisage the relation between the “developing” and the “developed world” that can also be fruitfully drawn on here is that of a dominant “meta-geography” which is the product of discourse. This is “a set of spatial structures through which people order their knowledge of the world: the often unconscious frameworks that organize studies of history, sociology, anthropology, economic, political science, or even natural history” (Lewis and Wigen, 1997, p.ix). As such they will be understood here as relating to a particular historical and epistemological position. They are elements of popular and wider political discourses that have come to denote certain, yet not always clearly, circumscribed situations and types of relations. They are not understood as factual entities that describe actual geo-political borders or countries. To highlight this fact they will be surrounded by quotation marks.

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